

# 1963 CENSUS OF MINERAL INDUSTRIES

Volume I

## Summary and Industry Statistics

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**U.S. DEPARTMENT OF COMMERCE**  
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**BUREAU OF THE CENSUS**  
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## Acknowledgments

The 1963 Census of Mineral Industries was conducted under the direction of Maxwell R. Conklin, Chief of the Industry Division, Owen C. Gretton, Assistant Chief, and Vivian Eberle Spencer, Chief of the Mineral Industries Program. Within the Industry Division, program responsibility along industry lines was shared by the following individuals who participated importantly in the entire census program: Wilhelmina F. Whiting, Metal Mining, Coal Mining, and Non-metallic Minerals Mining; and C. H. Wallace Sedgewick, Oil and Gas Extraction. The names of the supporting statisticians in the above commodity areas who made significant contributions appear in the 18 industry reports which were published separately prior to their assembly into the Summary and Industry Volume.

Within the staff areas of the Industry Division, Jack L. Ogus, Assistant Chief for Statistical Methods, was responsible for statistical methods and sampling techniques; he was assisted by Donald F. Clark, Elmer S. Biles and Edward A. Robinson provided staff coordination on the interrelationships between the Census of Mineral Industries and the Census of Manufactures. The application of the system of industrial classification of establishments was supervised by William Cooper. Alan I. Blum coordinated the work of the Division's professional staff at the Jeffersonville, Ind., Operations Office. The preparation of the manuscript for printing was the responsibility of Angela R. Daly.

Systems and procedures used in processing 1963 census reports were developed in the former Economic Operations Division, Marlon D. Bingham, Chief, and in the present Systems Division, Sol Dolleck, Chief, assisted by Samuel Schwind, Nathan Lesowitz, and Jack Margolis. Under the direction of Eugene L. Wendt, computer programming was developed and supervised by Mary H. Johnson and Roger O. Lepage, assisted by Paul E. Polissant. Clerical procedures were developed by Joseph N. Brooks and William W. Perry, under the supervision of Carl Mueller. Quality control plans and procedures were developed by George Minton, Maxwell R. Jeane, and John F. Powell, under the direction of Herman H. Fasteau. Robert D. Krook, Executive Officer, Census Operations Office at Jeffersonville, Ind., was responsible for the phases of processing operations performed there; he was assisted by Gene P. King and Waller Wynne, Jr. Data processing and related operations were performed by the former Data Processing Systems Division, Robert F. Drury, Chief.

Staff members in other divisions and offices of the Census Bureau also made significant contributions to the 1963 census. Arthur Horowitz, Coordinator of Mineral Industries and Manufactures Censuses, made important contributions to the planning and operational phases of the work. Murray Dessel, Economic Research and Analysis Division, coordinated the overall processing of large, multiunit companies and provided the statistics on central administrative offices and auxiliaries. Harold T. Goldstein, also of the Economic Research and Analysis Division, coordinated industry coding concepts in mineral industries with those followed in manufactures and business fields. Conrad J. Thoren and George W. Morris, Geography Division, supervised the preparation of maps and charts. Geraldine Censky and Frances Bresnahan, Administrative and Publications Services Division, provided editorial supervision and publication planning.

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Library of Congress Card No. A66-7829

## SUGGESTED CITATION

U.S. Bureau of the Census, Census of Mineral Industries, 1963  
Volume I, Summary and Industry Statistics  
U.S. Government Printing Office, Washington, D.C., 1967

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For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402, or any Department of Commerce field office. Price \$6.50

## Preface

This is one of two volumes presenting the final results of the 1963 Census of Mineral Industries. The 1963 census was a large-scale undertaking which depended upon significant contributions from numerous public and private organizations and individuals. The excellent cooperation of about 35,000 mining companies in completing the appropriate report forms was basic to the census. Also essential was the cooperation of the Social Security Administration, the Internal Revenue Service, and the Bureau of Mines in making available certain records, thus reducing the cost of conducting the census.

The advice and counsel of trade associations, individual mining companies, the Bureau of Mines and other government agencies, and research and marketing organizations were most valuable in determining the content of the reports, especially the product inquiries. The Advisory Council on Federal Reports provided special assistance in the matter of determining the feasibility of collecting various types of data. Precensus exchanges of ideas with the Census Bureau advisory committees of the American Statistical Association, American Economic Association, and the American Marketing Association contributed significantly to the planning phases of the census. Timely publicity was given the mineral industries census by chambers of commerce, local newspapers, trade papers, and television and radio stations.

The Bureau of Mines cooperated with the Bureau of the Census in conducting the 1963 Census of Mineral Industries. The Census Bureau is particularly indebted to the Offices of Chief Statistician and Chief Economist of the Bureau of Mines for their staff work in planning and conducting the census, and to the Bureau of Mines field offices, which collected and processed a major portion of the information for small establishments.

# Census of Mineral Industries Publication Program

Final results of the 1963 Census of Mineral Industries are published in two volumes, each containing a specific type of data.

## VOLUME I. SUMMARY AND INDUSTRY STATISTICS

### SUMMARY STATISTICS

In addition to a general summary chapter which presents historically the basic data for industries and geographic areas, separate summary chapters present data on a subject basis. The chapters listed below were issued initially as separate reports (Series MIC63(1)—, numbers 1 to 8).

1. General Summary
2. Size of Establishments
3. Type of Organization
4. Employment and Related Statistics
5. Type of Operation
6. Fuels, Electric Energy, and Selected Supplies Used
7. Power Equipment in Mineral Industries
8. Water Use in Mineral Industries

### INDUSTRY STATISTICS

Industry statistics are presented in 14 chapters, covering specific industries, and 4 summary chapters. Each chapter provides information for an industry or group of related industries. Figures for the United States are provided for each of 50 mineral industries and 22 subindustries on number of companies, number of establishments, employment, man-hours, payrolls, value added in mining, quantity and value of products shipped and supplies used, quantity and cost of fuels and electric energy purchased and quantity produced and consumed, cost of contract work, cost of purchased machinery, capital expenditures, and horsepower of equipment. Detailed statistics are shown by geographic region, by State, and by type of operation. Comparable figures for earlier years are included. The 18 chapters were issued previously as separate reports (Series MIC63(1)—, numbers 10A to 14F).

## VOLUME II. AREA STATISTICS

This volume contains separate chapters for each of 48 States and a single chapter in which Maryland, Delaware, and the District of Columbia are combined. The chapters provide statistics for each State and include comparable figures for earlier years. Data are presented for each of the 50 mining industries, insofar as they have operations in a particular State; for 2- and 3-digit industry groups, by type of operation and by county; and for number of establishments, by size and by county. Statistics on

payrolls; man-hours; capital expenditures; cost of supplies, etc.; purchased machinery installed; and number of mining establishments are also included. A chapter containing a general summary and summary data for the nine geographic divisions also appears in this volume. The 49 State chapters were issued previously as separate reports (Series MIC63(2)—, numbers 1 to 49).

# The 1963 Census of Manufactures Publication Program

The 1963 Census of Manufactures was conducted jointly with the Census of Mineral Industries and was similar in both scope and publication program. Final results have been published in three volumes, as follows:

Volume I, Summary and Subject Statistics, contains a summary chapter, 11 subject-type chapters, and three special reports: Manufacturing Activity in Government Establishments, Shipments of Defense Oriented Industries, and Origin of Exports of Manufactured Products.

Volume II, Industry Statistics, contains separate chapters for each of 80 groups of related industries which cover approximately 430 individual industries. This volume is published in two parts. Part 1 contains a general summary chapter and chapters for SIC Major Groups 20 to 28; Part 2 contains chapters for SIC Major Groups 29 to 39 and 19. The report, Manufacturing Activity in Government Establishments, is included in this volume.

Volume III, Area Statistics, contains separate chapters for each State and the District of Columbia. The report, Manufacturing Activity in Government Establishments, is included in this volume.

## OTHER REPORTS

Two series of reports have been issued showing the location and number of manufacturing plants classified according to size. The first series (9 reports) places emphasis on the industry, showing data by location. The second series (9 reports) places emphasis on the location, showing data by industry. The series titles are as follows:

Location of Manufacturing Plants by Industry, County, and Employment Size (MC63(S)—3, numbers 1 to 9)

Location of Manufacturing Plants by County, Industry, and Employment Size (MC63(S)—4, numbers 1 to 9)

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# Industry Chapter Descriptions

Chapters in this volume are coded to industries as classified in the Standard Industrial Classification (SIC) System. Pages are numbered with a chapter identification prefix; for example, the chapter on Iron Ores in Major Group 10 will begin on page 10B-1. The list below shows the prefix identification for each chapter and the SIC industries included under each title.

## Major Group 10—METAL MINING

### 10A Metal Mining

#### 10B Iron Ores

1011 Iron ores

#### 10C Copper, Lead, Zinc, Gold, and Silver Ores

1021 Copper ores  
1031 Lead and zinc ores  
1042 Lode gold  
1043 Placer gold  
1044 Silver ores

#### 10D Bauxite and Ferroalloy Ores, Except Vanadium

1051 Bauxite  
1062 Manganese ores  
1064 Tungsten ores  
1069 Ferroalloy ores, n.e.c.

#### 10E Metal Mining Services and Miscellaneous Metal Ores

1081 Metal mining services  
1092 Mercury ores  
1093 Titanium ores  
1094 Uranium-radium-vanadium ores  
1099 Metallic ores, n.e.c.

## Major Group 11—COAL MINING

### 11A Coal Mining

#### 11B Anthracite Mining

1111 Anthracite  
1112 Anthracite mining services

## Major Group 12—BITUMINOUS COAL AND LIGNITE MINING

### 12A Bituminous Coal and Lignite Mining

1211 Bituminous coal  
1212 Lignite  
1213 Bituminous coal mining services

## Major Group 13—CRUDE PETROLEUM AND NATURAL GAS

### 13A Oil and Gas Extraction

#### 13B Crude Petroleum and Natural Gas

1311 Crude petroleum and natural gas

#### 13C Natural Gas Liquids

1321 Natural gas liquids

#### 13D Oil and Gas Field Services

1381 Drilling oil and gas wells  
1382 Oil and gas field exploration services  
1389 Oil and gas field services, n.e.c.

## Major Group 14—NONMETALLIC MINERALS MINING

### 14A Nonmetallic Minerals (Except Fuels) Mining

#### 14B Stone

1411 Dimension stone  
1421 Crushed and broken stone

#### 14C Sand and Gravel

1441 Sand and gravel

#### 14D Clay, Ceramics, and Refractory Minerals

1452 Bentonite  
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1454 Fuller's earth  
1455 Kaolin and ball clay  
1456 Feldspar  
1459 Clay and related minerals, n.e.c.

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1493 Mica  
1494 Native asphalt and bitumens  
1495 Pumice and pumicite  
1496 Talc, soapstone, and pyrophyllite  
1497 Natural abrasives, except sand  
1498 Peat  
1499 Nonmetallic minerals, n.e.c.

#### 14E Chemical and Fertilizer Mineral Mining

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1473 Fluorspar  
1474 Potash, soda, and borate minerals  
1475 Phosphate rock  
1476 Rock salt  
1477 Sulfur  
1479 Chemical and fertilizer mining, n.e.c.

# Chapter 1

## Introduction

### I. GENERAL

1. Purpose of the Census of Mineral Industries
2. Economic Significance of the Mining Sector
3. Earlier Censuses of Mineral Industries
4. Definition of Mineral Industries
5. The Standard Industrial Classification
6. Establishment Statistics
7. Geographic Areas
8. Coverage of the Census
9. Cooperation With the Bureau of Mines
10. Development of the Mailing List
11. Collection and Processing of Reports
12. Census Report Forms
13. Establishment Location and Company Characteristics

### II. EXPLANATIONS OF TERMS USED IN COLLECTION AND PUBLICATION OF DATA

14. Type of Operation
15. Operating Companies
16. Persons Engaged in Mining
17. Monthly and Average Employment

18. Production, Development, and Exploration Worker Man-Hours
19. Payrolls for the Year
20. Supplies and Related Costs, Contract Work, and Purchased Machinery
21. Specific Supplies Used
22. Minerals Prepared
23. Capital Expenditures
24. Individual Products
25. Indexes of Production and Unit Value
26. Shipments, Production, Custom Milling, and Net Shipments
27. Value Added in Mining
28. Energy Used
29. Power Equipment
30. Relation of Labor Costs to Output

### III. SPECIAL REPORTS AND PROCEDURES

31. Special Reports Shown in Volume I, Summary and Industry Statistics
32. Imputation of Data
33. Confidentiality of Data for Individual Companies
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### I. GENERAL

#### 1. PURPOSE OF THE CENSUS OF MINERAL INDUSTRIES

The census of mineral industries provides a detailed account of the activities of the mineral raw materials industries in the United States. This census obtains, from every mining establishment with one employee or more and for most others with products or expenditures amounting to \$500 or more, information on input of labor, supplies, and equipment; output of products and developed mineral properties; location; mining methods; and the legal form of organization of the owning firm. This information is obtained in sufficient detail to permit classification of the establishment by industry, by type of operation, by size, by the homogeneity of its output and, where desirable, by extent of vertical integration and other characteristics.

The census of mineral industries is conducted simultaneously with the censuses of manufactures, wholesale and retail trade and selected services, and transportation.<sup>1</sup> This has facilitated the statistical coverage of the entire range of activities of most enterprises and a consequent improvement in the capability of the Bureau of the Census both to

deal effectively with the statistical problems of identifying establishments which support mining activity, such as central administrative offices, auxiliaries, and sales branches, and to classify entire enterprises into industrial categories.

General statistics information (total employment; payroll; number of production, development, and exploration workers; man-hours; wages; cost of supplies, etc.; value of shipments and receipts; capital expenditures; value added by mining) from the census of mineral industries is published by industry, by area, by employment size of establishment, by type of operation, and by type of ownership. Information on detailed industrial characteristics is supplied for each State and for large mining counties; overall measures of mining activity are shown for all other counties in which a significant amount of mining is done. This information constitutes a periodic inventory of the Nation's mineral industries that provides a benchmark for measuring the changes in their structure.

The census of mineral industries is not only a benchmark for many surveys, but also the means of updating other important indicators of the economic activity. It provides important information on the mining segment used in the national income accounts. Census data on supplies used and product output are basic to the mining sector of the input-output studies of the Bureau of Mines and the Office of Business Economics. The information derived from the census of mineral industries is

<sup>1</sup> The 1963 censuses covered the United States, Guam, and the Virgin Islands. Separate censuses of manufactures and business for 1963 were also conducted in Puerto Rico jointly with the Commonwealth Government. The statistics from 1958 onward in-

Table A. PERCENT DISTRIBUTION OF RAW MATERIALS PRODUCTION FOR SELECTED PERIODS:  
1900 to 1959

Raw materials group	1900-09 average	1920-29 average	1950-59 average
All raw materials.....	100	100	100
Minerals.....	17	26	33
Agricultural materials.....	67	62	60
Forest products.....	15	10	6
Fishery and wildlife products.....	1	1	1

Source: U.S. Bureau of the Census. Raw Materials in the United States Economy: 1900-1961 (Working Paper No. 6).

Federal Reserve Index of Industrial Production—a key monthly indicator of current economic activity.

The concurrent collection of comparable data on wholesale and retail trades, selected services, manufacturing, and minerals in the censuses beginning with 1954 has encouraged the Census Bureau to develop its Enterprise Statistics Program, which relates census company-level data to the establishment data. Thus, a measure of the integration and diversification of the American enterprise system becomes available. Likewise, through the Enterprise Statistics Program, it is possible to link census establishment-based data on a modified basis to other statistical systems, such as those of the Internal Revenue Service's Statistics of Income for corporations.

## 2. ECONOMIC SIGNIFICANCE OF THE MINING SECTOR

The mineral industries in recent years have accounted for less than 2 percent of national income and have required employment of less than 2 percent of all gainful workers in the United States. Nevertheless, the mineral industries furnished an increasing proportion of the raw materials base of

the economy. In 1961, the mining industries supplied 32 percent of all raw materials produced; agricultural materials, 61 percent; forest products, 6 percent; and fishery and wildlife products, 1 percent. This may be compared with averages for the first decade of this century when mineral products accounted for only 17 percent of all raw materials. Table A compares such figures for three periods in the last half century.

Production of minerals in the United States requires a relatively much greater expenditure of capital and equipment than is needed for the manufacturing industries. Although value added in mining in 1963 amounted to only 8 percent of total value added for mining and manufacturing combined, capital expenditures in the mineral industries were 22 percent of the total for mining and manufacturing, and horsepower of power equipment, excluding highway-type equipment, 19 percent of the total. (See table B.) Moreover, the oil and gas extraction industries alone accounted for 17 percent of all capital expenditures for mining and manufacturing. (In comparing figures in table B, it should be noted that value added in mining includes a measure of value added in the development of mineral properties, see section 27, and capital expenditures include expenditures for development of mineral properties, see section 23.)

Table B. VALUE ADDED, EMPLOYMENT, CAPITAL EXPENDITURES, AND HORSEPOWER OF EQUIPMENT  
IN MINERAL AND MANUFACTURING INDUSTRIES: 1963

Item	Mineral industries		Manufacturing industries	Mineral industries as percent of mineral and manufacturing industries	
	All mining	Oil and gas extraction only		All mining	Oil and gas extraction only
Value added.....\$1,000,000..	15,910	11,020	192,103	7.6	5.3
Capital expenditures.....do..	3,264	2,552	11,371	22.3	17.4
Employment.....1,000..	616	272	16,961	3.5	1.5
Horsepower of power equipment:					
Including highway type.....do..	52,772	28,309	(NA)	(NA)	(NA)
Excluding highway type.....do..	36,255	16,924	151,498	19.3	9.0

(NA) Not available.

in conjunction with mining) is excluded from the mineral industries.

The 1963 Census of Mineral Industries is the 15th such census of the United States. The first minerals census covered the year 1840. Such censuses have been conducted for the intervening years: 1850, 1860, 1870, 1880, 1889, 1902, 1909, 1919, 1929, 1935, 1939, 1954, and 1958. Present legislation provides for a census of mineral industries to cover the year 1967 and every fifth year thereafter.

The scope and quality of the minerals censuses have varied. While many of the problems and concepts involved in such a census were recognized early, the difficulties of locating mineral operators and the meager records often maintained impaired the quality of the first few censuses. Beginning with 1880, however, fairly comparable statistics have been available. The most comprehensive previous censuses are those covering the years 1880, 1889, 1902, 1909, 1919, 1939, 1954, and 1958.

For 1963, as in previous years, most of the basic inquiries were common to the censuses of mineral industries and manufactures. The statistics published for mineral industries are generally comparable with those published for manufacturing industries, although in somewhat greater detail.

#### 4. DEFINITION OF MINERAL INDUSTRIES

The mineral industries include all establishments primarily engaged in mining. This term is used in the broad sense to include the extraction of minerals occurring naturally: Solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is also used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation and beneficiating needed to render the mineral marketable. Exploration is included as is the development of mineral properties. Services performed on a contract, fee, or other basis in the development of mineral properties are classified separately within this division.

Mining operations are classified by industry, on the basis of the principal mineral produced or, if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The recovery of material from culm banks, ore dumps, and other waste minerals piles is classified in the appropriate mining industry according to the mineral product recovered.

Mineral preparation plants are usually operated together with mines or quarries and frequently no separate records for them are maintained. All such preparation plants are included in the scope of the minerals census. In general, separately operated preparation plants, whether they process minerals for the account of the operator or on a custom or toll basis for others, are also included in the minerals census. Coal cleaning and sizing plants operated at mines or as separate establishments are also included. However, crushing, grinding, and other treatment of certain non-metallic minerals at separately operated plants is included in the manufacturing industries.

Statistics on mining operations which are carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mix concrete plants) are not within the scope of this census. However, certain information on these operations has been obtained in the census of manufactures and is included in some of the summary and industry reports and in the State reports. Wherever such inclusion occurs, it is clearly specified.

All blast furnaces; metal smelters; metal and petroleum refineries; plants manufacturing cement, brick, tile, and pottery; and plants engaged in dressing or polishing stone are classified in the manufacturing industries. Separate reports were obtained and included in the minerals census for the few ore-dressing plants operated in conjunction with smelters and for the few natural gas liquids recovery plants operated as parts of chemical establishments.

#### 5. THE STANDARD INDUSTRIAL CLASSIFICATION

The specific industry coding and grouping in the 1963 Census of Mineral Industries follows the structure of the Standard Industrial Classification Manual (SIC), published by the Bureau of the Budget.

This manual, which is a classification structure for the entire national economy, was first issued in 1939. In the mining sector, the manual built upon the mining industry classifications developed over the years in connection with the census of mineral industries. The SIC is intended for use in classifying establishments by type of activity in which they are engaged in order to facilitate the collection, tabulation, and publication of figures relating to establishments and to promote uniformity and comparability in the presentation of statistics. It is used by all Federal statistical agencies, by most State agencies, and by many trade associations, research organizations, and others.

There is no other industrial classification system in widespread use, nor is there any other general-purpose system described in detail in official manuals or other published documents. Awareness of the SIC by business analysts, executives, statisticians, research scholars, and others has grown rapidly and will continue to increase, particularly in view of the adaptability of the decimal numeric system in mechanical processing.

The SIC divides all activities into broad industrial divisions (manufacturing, mining, retail, agriculture, etc.). It further subdivides each division into major industry groups, then into industry groups, and finally into detailed industries. The numbering system provides flexibility, permitting use of classification at various levels of detail according to the specific needs and uses desired. Employing a decimal system of coding, the Major Industry Group is assigned two digits (Major



Industry group	Value added in mining		Employment	
	Million dollars	Percent of total	Thousand employees	Percent of total
All mineral industries.....	15,910	100	616	100
Metal mining.....	1,418	9	77	12
Anthracite mining.....	120	1	12	2
Bituminous coal and lignite mining.....	1,607	10	134	22
Oil and gas extraction.....	11,020	69	272	44
Nonmetallic minerals mining.....	1,745	11	121	20

Group 10, for Metal Mining), the Industry Group, three digits (Group 104 for Gold and Silver Ores), and the industry, four digits (Industry 1042 for Lode Gold). Thus, for each 4-digit industry, it is possible to identify the Industry Group to which it belongs by the first three digits of its code and the Major Industry Group by its first two digits.

The minerals census covers all establishments classified in Division B—Mining—of the Standard Industrial Classification. This classification divides the Mining industries into five Major Groups: Metal mining; anthracite mining; bituminous coal and lignite mining; oil and gas extraction; and nonmetallic minerals, except fuels, mining. These five major groups are divided into 20 subgroups and into 50 individual industries. Table C shows the relative magnitude of the five major groups in terms of value added in mining and employment.

Separate general statistics are published for the SIC industries. Also, selected statistics are published for certain subindustries, such as lead ores, zinc ores, oil- and gas-field well surveying and cementing wells services, crushed and broken limestone, glass sand, and asbestos. The definitions of these industries and subindustries are included in the introductory texts of the pertinent industry reports.

The industry and subindustry classifications used in the 1963 minerals census are, in general, the same as the industry classifications used in the 1958 census and other recent minerals censuses.

## 6. ESTABLISHMENT STATISTICS

The census of mineral industries obtains data, on the basis of an entire establishment, for the output and shipments of mineral products; operating and development costs; and labor, mechanical equipment, and materials requirements. Because of the nature of most operators' records, these data necessarily include the secondary products of the establishment as well as the primary products which determine the industry classification. Thus, some bituminous coal mines also produce clay; many oil wells also produce gas; silver ores contain significant quantities of copper, lead, zinc, gold, and other metals. Mines producing significant quan-

tities of two or more different minerals are classified according to the mineral of greatest value (not tonnage) shipped during the year. A mine producing ores containing both silver and lead, for instance, is classified as a silver mine if the silver contained exceeds in value the lead content and vice versa. In most mining industries, however, the production of secondary minerals is of little statistical importance. This differs from the situation in manufacturing where about half of the industries have secondary production amounting to 10 percent or more of total shipments.

Operating companies were instructed that a mineral establishment, for purposes of the census report, is generally defined as a single physical location where mineral operations are conducted; for example, a mine only, a mine and preparation plant, or a preparation plant only. An establishment in this census, in general, represents workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or sites, however, are not necessarily considered as individual establishments.

For oil- and gas-field operations and contract services, reports were required for units somewhat different from the "establishment" reporting unit used for other types of mining. Only one report was required for all oil- and gas-field operations of a reporting company in each State except that district reports were required for Louisiana, Texas, and New Mexico. (However, information on employment, oil and gas production, and capital expenditures was included in this report on a county basis.) For service operations, only one report was required for all mineral services of a company in the United States. (However, information on employment, receipts for services, and capital expenditures was requested by county.)

In practice, some flexibility was allowed in the application of the establishment definition in specific industries. Where a company did not keep separate records for two or more establishments engaged in the same type of activity and located within the same State and county, a consolidated

report was usually accepted and the operations counted as a single establishment. Separate reports were frequently furnished for open-pit and underground operations, but consolidated reports were made for most industries. Such consolidation is very important in the anthracite industry.

Census tabulations of establishment reports differ substantially from those prepared on a company basis which not only combine activities at different locations (thereby eliminating inter-plant transfers), but also include the manufacturing activities of companies primarily engaged in mining. Census figures also differ to some extent from other surveys based on establishment reports where the definition of an establishment as to location and line of activity is not so rigidly applied.

Establishment counts shown in the 1963 census are closely comparable with those for most earlier years, except that the collection of district reports for operators of oil- and gas-field properties in Louisiana, Texas, and New Mexico increased the establishment counts significantly for these areas while providing a substantial amount of detailed information not previously available for each of the districts. However, for some census years, such

as 1929 and 1919, consolidated reports covering two or more operations appear to have been accepted to a greater extent than in 1963.

## 7. GEOGRAPHIC AREAS

In order to present census data at an intermediate level between the United States and the individual 50 States, the Census Bureau has used regional groupings for over a century. Beginning with the 1909 Census of Mines and Quarries, the present nine geographic divisions have been used. Beginning with the 1954 census, the nine divisions were grouped further into four broad geographic regions: Northeast, North Central, South, and West.

Not only are these groupings convenient for the summary presentation of census statistics below the U.S. level, but they are also needed to present uniform geographic information for those individual industries in which application of the Census disclosure law precludes the publication of individual State figures. The relative importance of the mineral industries in 1963 among States and geographic divisions is shown in table D.

Table D. VALUE ADDED IN MINING BY GEOGRAPHIC DIVISIONS AND STATES: 1963

Division and State	Value added in mining (million dollars)	Per-cent	Division and State	Value added in mining (million dollars)	Per-cent
United States, total..	15,910	100.0	South Atlantic--Continued		
New England.....	42	0.3	Virginia.....	145	0.9
Maine.....	1	(Z)	West Virginia.....	596	3.7
New Hampshire.....	2	(Z)	North Carolina.....	32	0.2
Vermont.....	9	0.1	South Carolina.....	19	0.1
Massachusetts.....	17	0.1	Georgia.....	76	0.5
Rhode Island.....	2	(Z)	Florida.....	109	0.7
Connecticut.....	11	0.1	East South Central.....	747	4.7
Middle Atlantic.....	740	4.6	Kentucky.....	337	2.1
New York.....	130	0.8	Tennessee.....	90	0.6
New Jersey.....	55	0.3	Alabama.....	119	0.7
Pennsylvania.....	555	3.5	Mississippi.....	201	1.3
East North Central.....	1,043	6.6	West South Central.....	7,802	49.0
Ohio.....	224	1.4	Arkansas.....	110	0.7
Indiana.....	108	0.7	Louisiana.....	2,640	16.6
Illinois.....	451	2.8	Oklahoma.....	806	5.1
Michigan.....	223	1.4	Texas.....	4,246	26.7
Wisconsin.....	37	0.2	Mountain.....	2,102	13.2
West North Central.....	1,069	6.7	Montana.....	111	0.7
Minnesota.....	368	2.3	Idaho.....	40	0.3
Iowa.....	33	0.2	Wyoming.....	453	2.8
Missouri.....	66	0.4	Colorado.....	253	1.6
North Dakota.....	74	0.5	New Mexico.....	650	4.1
South Dakota.....	26	0.2	Arizona.....	287	1.8
Nebraska.....	69	0.4	Utah.....	268	1.7
Kansas.....	433	2.7	Nevada.....	40	0.3
South Atlantic.....	1,012	6.4	Pacific.....	1,353	8.5
Delaware.....	35	0.2	Washington.....	24	0.2
Maryland.....			Oregon.....	18	0.1
District of Columbia....			California.....	1,253	7.9
			Alaska.....	53	0.3
			Hawaii.....	5	(Z)

(Z) Less than 0.05 percent.

and Louisiana, the two largest States in terms of value added by mining, and for New Mexico, the 1963 minerals census provided, for the first time, information by districts for the oil and gas extraction industries. Separate tabulations were made for North and for South Louisiana (including adjacent offshore operations); for 11 districts in Texas (3 of which include adjacent offshore operations); and for East and West New Mexico.

In Volume II, Area Statistics, industry detail is shown, wherever possible under the rules of confidentiality and size significance, at the regional, State, and county levels. All-mining totals are also shown. The level of industry detail in each area is as follows: For States, 2-, 3-, and 4-digit industry; and for counties, 2- and 3-digit industry shown only for those industry groups which have 500 thousand or more in value of shipments or receipts for the industry group in the county). In the industry reports of Volume I, Summary and Industry Statistics, county figures are also shown for coal mining and oil and gas extraction. For the oil and gas extraction industries, the counties in Louisiana, Texas, and New Mexico are grouped by district and district totals are shown.

In the census of mineral industries, as in the other economic censuses, each individual establishment was assigned a geographic code that indicated the State and the county in which it was principally located. For most mines and preparation plants, the location of the establishment can be specified with little or no ambiguity. Establishments which straddle boundary lines are generally classified according to the location of the principal activities. For the county statistics tabulations for the crude petroleum and natural gas and contract services industries, full statistics were estimated by county for each establishment by allocating the reported data on the basis of the county detail reported for employment, quantity production, receipts for services, and capital expenditures.

In previous censuses, the geographic code was manually assigned to every report after a clerical review of the physical location reported by the respondent. In 1963, the report form was pre-coded by high-speed electronic equipment prior to mailing through the use of an extensive file of addresses classified by place. Only those reports which indicated differences between the mailing address and the reported physical location were manually coded after receipt.

### 3. COVERAGE OF THE CENSUS

The 1963 Census of Mineral Industries excludes very small establishments and certain noncommercial operations. The small establishments excluded represent those without employees and

for which each of the following minimums was required: (1) value added for the entire year; (2) value of products shipped and services performed for others; (3) expenses for wages, salaries, supplies, minerals received for preparation, fuel, purchased electric energy, contract work, and purchased machinery; and (4) capital expenditures for development and exploration of mineral properties, new construction and major alterations, and new and used machinery and equipment.

The cutoff for establishments covered in the 1963 census was essentially the same as that used for 1958 and 1954, but lower than in other recent minerals censuses. For 1939 and 1929, in general, small establishments were excluded if each of three similar items amounted to \$2,500, and for 1919, if value of products was less than \$500 and expenditures for development work less than \$5,000. For bituminous coal and lignite, an output criteria of 1,000 tons was used in these three censuses. For 1939, common sand and gravel operations were excluded if they produced less than 15,000 tons of sand and gravel and had expenses of less than \$15,000. For 1929, common sand and gravel establishments producing less than 25,000 tons were excluded, and this industry was not covered in censuses prior to 1929. Minimums for size of establishment included were not provided for earlier censuses.

The production of minerals, particularly stone, sand, and gravel, by Federal, State, and local governments is excluded from the census. Also excluded is some production of these items by highway contractors who do not maintain separate records for sand and gravel production. The census includes, however, mining establishments operated entirely to serve other establishments of the same company, such as coal mines serving only coke ovens operated by the same company, oil and gas wells serving only refineries or public utilities owned by the same company, and copper mines and mills where all of the ore is transferred to a company-owned smelter.

The 1963 Census of Mineral Industries covered establishments meeting the value criteria whether or not they had employees. The mailing lists available for establishments with no employees, such as establishments for which all labor was furnished by proprietors or contractors, were somewhat less complete than for those with employees. However, it is believed that in most areas such establishments were included where they met the specified criteria. Specific limitations in such coverage are discussed in the separate industry texts.

Cumulative percentages for number of establishments, value added in mining, and capital expenditures by employment size classes are shown in table E.

TABLE 1. CUMULATIVE PERCENTAGES BY EMPLOYMENT SIZE CLASS FOR NUMBER OF ESTABLISHMENTS, VALUE ADDED IN MINING, AND CAPITAL EXPENDITURES: 1963

Employee size class	Number of mining establishments	Value added by mining	Capital expenditures
All establishments.....	100.0	100.0	100.0
0 to 4 employees.....	60.1	7.2	12.6
5 to 9 employees.....	73.8	11.9	17.8
10 to 19 employees.....	85.7	19.2	24.4
20 to 49 employees.....	94.7	34.1	38.3
50 to 99 employees.....	97.5	46.1	49.7
100 to 249 employees.....	99.1	63.3	65.6
250 to 499 employees.....	99.7	79.2	78.4
500 to 999 employees.....	99.9	89.4	88.8
1,000 to 2,499 employees.....	100.0	99.0	99.4
2,500 employees and over.....	100.0	100.0	100.0

In general, it is believed that the 1963 minerals census reports provided essentially complete coverage of production and development operations. About 98 percent of the total shipments of oil, and probably about 98 percent of the total shipments of gas were covered. This may be compared with an indicated 97 percent coverage in the 1958 census and an indicated 96 and 95 percent, respectively, in the 1954 minerals census. The special problems faced in covering this industry and details on the apparent coverage attained are discussed in the special text for Crude Petroleum and Natural Gas. Undercoverage of the crude petroleum and natural gas industry appears to have reduced the overall minerals census coverage of value of shipments by only about 1 percent. However, this undercoverage is somewhat more significant for certain States.

#### 9. COOPERATION WITH THE BUREAU OF MINES

The Bureau of Mines, U.S. Department of the Interior, cooperated with the Bureau of the Census in conducting the 1963 minerals census. The purpose of this cooperation was to assure comparable coverage and comparable but, insofar as feasible, unduplicated results, and to minimize the reporting burden for respondents.

For companies with less than five employees, except those engaged in oil and gas extraction or contract service operations, the Bureau of Mines supplied type of operation and commodity data based on its monthly and annual surveys. This information was supplied not only for operators with employees for which Census had a rather complete mailing list, but also for companies with no employees for which Census basic lists were incomplete. In order to provide the other necessary information for these small operators, special reports were collected by the Bureau of Mines for Census use which gave information on total payroll, total cost of supplies and energy used, cost of contract work, expenditures for purchased machinery, capital expenditures, and, for metal mining, value of shipments.

The Bureau of Mines played an important role in the development of the report forms in order to

minimize duplication of requested data and to assure at the same time that some comparable items were included by both agencies to relate the more detailed Bureau of Mines commodity data to the Census statistics. The Bureau of Mines also cooperated in the development of a comparison of the basic commodity statistics tabulated by the two agencies. This is shown in table 7 of the General Summary.

#### 10. DEVELOPMENT OF THE MAILING LIST

The basic mailing list for the 1963 minerals census was developed as part of the mailing list for the 1963 censuses of business, manufactures, and mineral industries.

The Internal Revenue Service (IRS) maintains a comprehensive list of names and addresses of legal entities with one or more employees which are required to file quarterly tax returns under the Federal Insurance Contributions Act. To each of these legal entities, IRS has assigned a unique employer identification (EI) number. Arrangements were made to obtain this list of EI numbers for the selection of those companies which were to be included in the 1963 censuses of business, manufactures, and minerals industries. Since this list contained many companies outside the scope of the economic censuses, it was matched to a similar list of EI numbers maintained by the Social Security Administration. The SSA assigns an industry code to every EI number, based on information reported by the taxpayer when he applies for an EI number. Only those EI numbers with industry codes within the scope of the economic censuses were included in the basic mailing list.

This list of EI numbers provided the industry code necessary to select the correct report form and a payroll size code to determine whether a standard or a short form was to be mailed. However, the list was defective in one basic respect: The EI number applied to a legal entity and not to an individual establishment, the basic unit for which census data are required.

Therefore, it was necessary to supplement this list by contacting all known or possible multi-establishment companies in order to obtain a list of their individual establishments. In January of 1963, a prec canvass form, NCX-1A, Listing of Establishments, was sent to all companies that had indicated in the 1958 Census of Mineral Industries that they had more than one mineral establishment. In addition, all "apparent" single-establishment companies in the IRS-SSA file of EI numbers with sizable employment were included in this prec canvass.

For the known multiestablishment companies, the Census Bureau prelisted the establishments as they had been last reported to the Census Bureau. The company was requested to update this list by deleting abandoned operations, correcting addresses, reporting the current EI numbers used for each establishment, and adding any establishments operated but not already included in the listing. The EI numbers reported for these multiestablishment companies were excluded from the list of EI numbers obtained from IRS-SSA prior to mailing the 1963 Census Report Forms. Thus, the 1963 Census of Mineral Industries list for single-establishment companies was obtained from the IRS-SSA, but the list of establishments of multi-unit companies was obtained directly from those companies by a special precensus survey.

While the IRS-SSA list was generally adequate in providing sufficient industry and size information to determine the proper form for mailing, a number of the EI numbers did not have precise industry or size information associated with them. A special form, NCX-3, "General Report," was mailed to all such companies in the 1963 censuses of business, manufactures, and minerals industries. Since it was assumed that these establishments were quite small, only limited statistics were required. On the basis of the information reported, these establishments were coded and included in the basic tabulations. If the NCX-3 indicated substantial activity, the company was recontacted with a standard census form.

The supplementation of the census basic list for "no employees" establishments with Bureau of Mines lists was discussed in section 9. In addition, the lists for the crude petroleum and natural gas industry were supplemented by a prec canvass of oil and gas field service companies in order to obtain the names and addresses of companies served. About 4,000 names were added to the list of operators of oil and gas field properties on the basis of this survey.

## 11. COLLECTION AND PROCESSING OF REPORTS

The 1963 census report forms were distributed and returned by mail. The very large multi-establishment companies were mailed their report forms in November 1963, in order to give them as much time as possible to meet the substantial demands of the 1963 census on their statistical staffs. Report forms for the smaller companies were mailed in January 1964. Collection of all report forms was completed by August 1964. All

mailing and receiving, including reminder mailings, routine editing, coding, and card punching, was done at the Census Bureau's Operations Office in Jeffersonville, Ind. The more difficult problem reports and all reports from very large companies were sent to Washington for review prior to punching. The punched data were transmitted to Washington through a telephone computer linkup and all computer processing, review of the tabulated data, and the preparation of the publications were performed in Washington.

Throughout the survey, there was a concerted effort to assure completeness of coverage through systematic reminders at 4- to 6-week intervals (including the use of certified mail, telegrams and, for the larger companies, telephone calls).

Particular attention was devoted to assuring completeness and correctness of the reporting by large companies. In the early stages of processing, the individual establishment reports of the very large companies were reviewed along with the company summary report, Form NC-K1, to assure that the company had included reports for all its establishments and subsidiaries and that there was no duplication in reporting among manufacturing, minerals, central offices, and sales branches and offices. The NC-K1 was also a vehicle for the company to report changes in ownership since the Census prec canvass, was conducted in the preceding year. Accurate company affiliation information is necessary, it should be noted, to enable the Census Bureau to review the tabulations to assure confidentiality of the data and to provide statistics for the Enterprise Statistics program. Part 2 of Form NC-K1 required that the parent company reconcile its payroll figures by EI numbers filed with the Internal Revenue Service to those reported on the individual censuses of manufactures, business, and mineral industries reports. As a result of this comparison, omissions were detected, as was duplication in reporting within the Census establishment file.

All report forms were edited by the computer. The operating ratios for each establishment were developed and compared with industry averages developed from the 1958 Census of Mineral Industries. Large establishments with identifiable problems were listed for subsequent review by the Bureau's statisticians. Smaller establishments with problems were tentatively accepted or modified by the computer, but they were annotated for subsequent examination. In the review of the tabulations prior to the publication of the final reports, the selected operating ratios for all establishments were analyzed and the mean ratio for all establishments in each industry determined. A frequency distribution of establishments according to operating ratio class was prepared, and those establishments whose ratios were more than two standard deviations from the industry average were isolated as "outliers," examined and, if necessary, corrected. A similar type of analysis was made for the individual products shipped and the individual supplies consumed.

Only one report form was required, in general, for the operations of each establishment. The report forms used were adapted to the 50 industries classified in mining; 23 different establishment forms being provided for the 1963 minerals census. These included 16 standard forms used for all large and multiestablishment companies and 7 short forms used for small establishments. For the larger industries, the standard forms, requiring full census detail, were used only for establishments above a given size in terms of number of employees. For the numerous smaller establishments, typically having less detailed records and representing a very small portion of output and employment, data requirements were limited to a relatively few key items on a series of short forms differing principally in the preprinted lists of product class items in the shipments inquiry.

In general, short forms were used for companies with less than five employees. While the collection on short forms represented a small percentage of each industry's employment, value added, etc., they represented a much higher proportion of number of establishments. In the natural gas liquids and contract services industries (other than oil and gas), no short forms were used. (About 17,000 of the approximately 39,000 reports in the minerals census were tabulated from short forms.)

Standard Forms.—Each standard form called for the same general items regardless of the industry: Total employment; total payrolls; production, development, and exploration worker employment; man-hours of such workers by department (with some adaptation of department information); wages of such workers; supply costs; value of shipments and receipts; fuels and electric energy quantity and cost; capital expenditures by type; and horsepower of equipment used. However, the forms differed in the detailed inquiries on the quantity and value of products shipped and the quantity and cost of individual supplies used. The report form for crude petroleum and natural gas included inquiries on the number of wells operated, drilled, idle, purchased, etc., by type of well. For wells completed in 1963, data were collected on cost of drilling by broad cost category, and number and footage by type of well. In addition, special inquiries were adapted to other individual industries or industry groups. (Sample forms appear in appendix C.)

Short Forms.—These forms, designed for small establishments, as noted above, were abbreviated versions of the standard forms and requested limited general and product information. For example, only total employment and payroll figures were requested, without detail by functional class (production workers and all other employees); production-worker man-hours and wages were not requested on short forms.

For oil and gas extraction, two short forms were used—one for operators of oil and gas field properties and one for contract services. The other short forms tabulated—one for metal mining, one for coal mining, and three for nonmetallic minerals mining—were composites of forms furnished to the

Bureau of Mines for the tabulation of its type of operation and commodity data and the reports which that Bureau collected for small operators for Census use. (See sample in appendix C.)

Form for Separate Central Administrative Offices and Auxiliaries of Mining Companies.—Separate reports for each central administrative office and auxiliary unit (storage warehouses, research laboratories, garages, repair shops, etc.), which served the mining establishments of the company rather than the general public, were obtained from the company if they were at locations different from the establishments served or if they serviced more than one establishment. The report form included inquiries on payrolls and employment. Approximately 800 such mining reports were tabulated in 1963. They accounted for about 46 thousand employees with payrolls of about \$417 million, which represent 7.5 percent and 11.1 percent, respectively, of the totals for all mining.

The employment and payrolls for these separate administrative offices and auxiliaries are included in the industry and State totals, unless otherwise specified. The employment and payrolls of such administrative offices and auxiliaries are also shown separately as tables 4 and 5 of the summary chapter, Employment and Related Statistics.

A special form for offshore oil and gas operations.—This form was required for each State in which a company performed such operations.

A special form for control purposes was also provided to summarize value of shipments and receipts and cost of drilling and equipping wells, reported by State and district, by operators of oil and gas field properties.

Form NC-K1, Company Summary Report Form.—This form requested consolidated company information on payrolls, employment, sales or receipts, inventories, capital expenditures, value of assets, and rental payments. It was restricted to companies with 250 or more employees in the industries included in the economic censuses.

Based on information filed on the establishment reports of the multiestablishment companies, the entire company was classified into 1 of 179 enterprise categories developed by grouping the Standard Industrial Classification industries. A special report, entitled "Enterprise Statistics, 1963, Part I, General Report on Industrial Organization," provides tables showing the characteristics and diversification of these multiestablishment companies as derived from the information reported on census establishment reports.

### 13. ESTABLISHMENT LOCATION AND COMPANY CHARACTERISTICS

Information was obtained on all 1963 report forms regarding the physical location, Social Security employer identification number, company affiliation, and legal form of ownership. This information was necessary to assure control over the completeness of coverage (see Section 10, Development of the Mailing List), while permitting, at the same time, the classification of each establishment by precise geographic location and type of organization.



## II. EXPLANATIONS OF TERMS USED IN COLLECTION AND PUBLICATION OF DATA

### 14. TYPE OF OPERATION

The type of operation statistics in industry reports are primarily based on replies to a check-box inquiry which listed the usual mining and mineral preparation methods used in a particular industry. The respondent was asked to check each method used in the establishment reported. Wherever possible, separate statistics are provided on establishments using underground mining methods, using a combination of underground and open-pit methods, and using open-pit methods only. For selected industries, separate statistics are provided by type of underground mining, such as for establishments having as the dominant method open stoping, shrinkage stoping, square setting, or block caving. Separate figures are provided, where possible, for mines with and without preparation plants, and for establishments with preparation plants classified by the dominant preparation method, such as crushing, washing, flotation, or gravity concentration. Separate statistics are also provided on producing and nonproducing operations (an establishment being defined as nonproducing if

no mineral products were shipped during the year). For the crude petroleum and natural gas industries, details were obtained on the type of wells drilled and operated and reports were classified on the basis of whether they represented oil wells only, both oil and gas wells, or gas wells only, and on the basis of whether or not they included drilling.

The distribution of principal types of operation by major industry groups is indicated in table F.

### 15. OPERATING COMPANIES

For the purpose of this census, an operating company is defined as a corporation, individual proprietorship, partnership, cooperative, or other organization, regardless of size, directly engaged in production or development activities at one or more mineral establishments. An operating company may own the property operated or be the lessee of such property or operate for the account of others on a contract or fee basis. Regardless of the number of establishments operated by a company or the number of States in which it operates, the company is counted only once in summary statistics. Hence, the sum of the detailed statistics for number of operating companies is usually greater than the statistics shown for group totals.

Table F. EMPLOYMENT AND VALUE ADDED FOR MINERAL INDUSTRIES, EXCEPT SERVICE INDUSTRIES, BY TYPE OF OPERATION AND MAJOR INDUSTRY GROUP: 1963

Major industry group	Producing establishments							Non-producing establishments
	Mines only			Mines with preparation plants			Separately operated preparation plants	
	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Underground mines	Open-pit mines	Combination methods, well operations, and other methods		
	Number of employees (1,000)							
All mineral industries.....	45.8	19.7	152.4	96.9	116.7	23.2	26.5	4.8
Metal mining.....	8.0	6.8	3.3	23.4	19.2	0.9	6.8	2.0
Anthracite mining.....	2.5	0.9	0.6	0.7	0.7	3.5	1.2	0.0
Bituminous coal and lignite mining.....	34.6	5.2	3.2	62.0	11.8	8.9	2.7	0.1
Oil and gas extraction.	-	-	143.2	-	-	-	13.9	2.1
Nonmetallic minerals mining.....	0.7	6.8	2.1	10.8	85.0	9.9	2.0	0.6
	Value added in mining (\$1,000,000)							
All mineral industries.....	417	326	9,205	1,309	2,031	344	1,014	(1)
Metal mining.....	136	157	31	338	560	18	160	(1)
Anthracite mining.....	23	13	7	4	10	40	14	(1)
Bituminous coal and lignite mining.....	250	84	43	776	257	137	41	0.6
Oil and gas extraction.	-	-	9,050	-	-	-	763	(1)
Nonmetallic minerals mining.....	8	73	74	191	1,204	150	36	(1)

<sup>1</sup>Not shown since the cost of supplies, purchased fuel and electric energy, contract work, and purchased machinery installed exceeds the value of shipments and receipts plus capital expenditures.

each industry in table 1 of the industry reports, with comparable figures for earlier years. In table 12 of the industry reports, the number of operating companies is distributed by number of establishments operated by each company within an industry, with an indication of the size of establishments operated by companies in each class.

## 16. PERSONS ENGAGED IN MINING

The employment statistics represent all full-time and part-time employees at the establishment who worked or received pay for any part of the pay period which included the 12th and ended nearest the 15th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacation during these pay periods. Also included are miners paid on a per ton, car, or yard basis. Excluded are employees at the mine who were on the payroll of another employer (such as employees of contractors) and employees at company stores, boarding houses, bunk houses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the rolls but not working during the period. Officers of corporations are included as employees, but proprietors and partners of unincorporated firms are excluded.

This total employment is divided into two functional classifications comparable with the basic classifications used for the manufacturing industries. Mining companies were instructed to report these two employee classifications as follows:

Production, development, and exploration workers.—Employees up through the working foreman level engaged in manual work, using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards. Included are exploration work, mine development, storage, shipping, maintenance, repair, watchmen services, auxiliary production for use at establishments (such as power plant), record-keeping, and other services closely associated with these production, development, and exploration operations at the establishment covered by the report. Gang and straw bosses and foremen who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis, the men engaged by them and paid out of the total amount received by these miners, and other employees at the establishment but not on its payroll, if paid directly through its own employees, such as superintendents and foremen. Supervisory employees above the working foreman level are excluded from this category.

All other employees.—Nonproduction personnel at the establishment above the working foreman level engaged in such activities as supervision, sales, highway trucking (by employees not entering mines or pits), advertising, credit collection, clerical, and routine office functions, executive, purchasing, finance, legal, personnel (including cafeteria and medical), professional (such as engineers and geologists), and technical activities.

establishment engaged in the construction of major additions or alterations to the plant who are utilized as a separate work force. (Workers engaged in regular maintenance and repair operations are not included here, but are classified as production, development, and exploration workers.)

Employees at an office located at or near the mining establishment are usually included in the mine report. Where such offices or auxiliary units were reported separately, their employees are included in the totals for individual industries and the State tables for each industry, but are not always classified by type of operation or by frequency class in frequency tabulations. These figures, classified by industry and State, are also shown separately in the summary chapter, Employment and Related Statistics. This practice differs from that used in the census of manufactures, in which employment at central administrative offices and auxiliary units were included in total manufacturing but not in individual industries.

In the mineral industry reports, besides these statistics on two types of employment, figures are shown on the total number of proprietors and firm members, and separately on the number of these who regularly performed production, development, or exploration work.

## 17. MONTHLY AND AVERAGE EMPLOYMENT

The 1963 report forms requested employment figures for "production, development, and exploration workers" for four selected pay periods (midmonth employment in March, May, August, and November). For "all other employees," only a mid-March figure was requested. The "annual average" is composed of an average of the four monthly figures for production, development, and exploration workers plus the March figure for "all other employees."

This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods approximates very closely for almost all industries the average employment for the year that would be obtained from 12 monthly pay periods.

The employment averages shown in this report for all industries are based on the four-month figures described above. However, many of the mineral industries are highly seasonal. For such industries, figures on production, development, and exploration workers were collected for all 12 months and are shown in table 3 of the industry chapters.

The average employment for mines, based on 4 or 12 monthly figures, is generally comparable with employment statistics compiled for manufacturing and mining by other government agencies, but is lower than the measure used in annual accident and other reports to the Bureau of Mines. The latter measure represents the "average number of employees on active days," excluding shutdown periods. Such averages generally exceed the average for 12 months, sometimes by as much as 25 percent.



## 18. PRODUCTION, DEVELOPMENT, AND EXPLORATION WORKER MAN-HOURS

The total man-hours figures represent all man-hours of production, development and exploration workers (as defined in section 16) worked on both active days, during which there was production or development work, and inactive days, when only watchmen, inspectors, repairmen, and other maintenance men were on duty. They include all man-hours worked or paid for at the mining operations, except hours paid for vacations, holidays, or sick leave, when the employee was not at the mine. Included are actual overtime hours, not straight-time equivalent hours. Man-hours of working proprietors are excluded.

The Census Bureau man-hour figures differ from those published monthly by the Bureau of Labor Statistics, covering all hours paid for, whether worked or not, and relate only to the payroll period ending nearest the middle of each month. They differ from man-hours collected by the Bureau of Mines which include data for all employees classified as exposed to accidents, rather than data for only production, development, and exploration workers.

Census man-hour figures were collected separately by department, such as for work in underground mining and development, in open-pit mining and stripping, at surface shops and yards for the mine, and at preparation plants (including auxiliary works for these plants). For the oil and gas industries, separate figures were obtained for operating and maintaining wells, for drilling wells and rig building, for exploration work, and for other work. A separate figure was also obtained on man-hours devoted to development and exploration work and charged to capital or depletion accounts.

Man-hours were well reported for the larger establishments, although the distribution by department was inadequately reported in some instances. Where total man-hours or the distribution by department were not reported and it was not feasible to obtain the information by correspondence, the data were estimated. Moreover, man-hours were not collected for those very small establishments that were mailed special short forms (see section 12). Experience has shown that these small establishments have difficulty in distinguishing between production and other types of employees. Man-hours were estimated for such establishments as well as for other nonreporters. Since the estimating was largely confined to small establishments, there is no significant qualification to the validity of overall industry, geographic, and department totals for man-hours, except for a few industries characterized by small establishments. However, the man-hour figures for establishments with fewer than 5 employees, shown in the size of establishment tables, should be interpreted with this factor in mind.

## 19. PAYROLLS FOR THE YEAR

This item represents the gross earnings paid in the calendar year 1963 to all employees on the payroll of mining establishments, and is comparable with the definition of payrolls used for the Federal

establishment, such as salaries, wages, commissions, dismissal pay, all bonuses, vacation and sickleave pay, and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. Included are payments to miners paid on a per ton, car, yard, or footage basis. The total includes salaries of officers of these establishments, if a corporation; it excludes payments to the proprietor or partners, if an unincorporated concern. It excludes payments to members of the Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production, development, and exploration work charged to employees and deducted from their wages.

The 1963 census definition of payrolls is that recommended to all Federal statistical agencies by the Bureau of the Budget, and is the same as that used for 1958. It should be noted that it does not include employers' Social Security contributions or other nonpayroll labor costs, such as employers' pension plans, group insurance premiums, and workmen's compensation. It should be noted also that these payrolls include wages paid employees of the establishment for development and construction work which would be charged to the capital account.

As in the case of employment figures, the payrolls of separately reported offices and auxiliary units are included in the industry and State tables, and are also shown separately by industry and State in the Summary Chapter, Employment and Related Statistics.

## 20. SUPPLIES AND RELATED COSTS, CONTRACT WORK, AND PURCHASED MACHINERY

The 1963 census report forms requested information on supplies, fuels, and electric energy used; on contract work done by others; and on purchased machinery installed for each establishment. These items included charges to both the current and capital accounts. The figures reported were to include items used during 1963 whether purchased, withdrawn from inventories, or received from other establishments of the company. For selected supplies and fuels and for electric energy, both quantity and cost data were requested. The cost data refer to direct charges actually paid or payable (after discounts) for items used during the year. Freight charges and other direct charges incurred by the establishment in acquiring the items are included. Where the company's records did not show actual amounts used, they were asked to approximate use by adding purchases (or receipts) during the year to opening inventory and subtracting closing inventory.

Separate figures were obtained for (a) selected supplies for some industries; (b) the value of minerals received for preparation (see section 22); (c) the amount paid for electric energy purchased; (d) the amount paid for all purchased fuels used for

heat, power, or the generation of electricity; (e) the cost of contract work done by others; (f) the cost of products bought and resold in the same condition; and (g) the cost of purchased machinery installed. Supplies and equipment used in mine development, plant expansion, and capitalized repairs, which are chargeable to fixed assets accounts, were included, as were supplies furnished without charge to contractors for use at the mining operation and supplies sold to employees for use at the establishment (see section 19). No data were obtained on such costs as advertising, insurance, telephone, and research and consulting services of other establishments; or on overhead costs, such as depreciation charges, rent, interest, and royalties.

Under contract work, companies were instructed to report the total amounts paid or due for contract services performed during the year, including payments for supplies and equipment incidental to this work which were furnished by the contractor. If part of the payment to contractors was in materials produced, the respondent was asked to estimate the value of the service performed. However, payments to miners paid on a per ton, car, yard, or footage basis were included under payrolls rather than under contract work (see section 19).

Under purchased machinery, companies were instructed to report all machinery, equipment, and parts for renewals and repairs, including equipment installed in the mine or mill as well as mobile loading and transportation equipment.

## 21. SPECIFIC SUPPLIES USED

In the 1963 minerals census, uniform quantity and cost data were obtained on the use of selected supplies. In most cases, comparable statistics on these items are available for 1958 and 1954. Collection of the supplies data was coordinated with the expanded manufactures statistics program for the 1963 census, which obtained data on over 300 materials for industries that accounted for 90 percent or more of their consumption in manufacturing.

For the minerals census, data on the quantity and cost of explosives and steel mill shapes and forms used were obtained for the metal and coal mining industries. In addition, data were obtained for the coal mining industries on the cost of round and hewn woods products and stumpage. For the oil and gas extraction industries, data were obtained on the quantity and cost of both gas (purchased for gas lift and repressuring) and steel mill shapes and forms used.

## 22. MINERALS PREPARED

On report forms for almost all mineral industries, except the contract services industries, a uniform inquiry was included on minerals prepared at the reported establishments. Figures were obtained on minerals prepared from three sources: (a) Crude minerals mined at the establishment (quantity); (b) crude minerals received from other establishments of the company or purchased from others (quantity and cost); and (c) crude minerals received for preparation on a custom or toll basis (quantity and estimated value).

## 23. CAPITAL EXPENDITURES

In the 1963 census, mining companies were asked to report expenditures made during the year for development and exploration of mineral properties, for new construction, and for machinery purchased at their operations that was chargeable to fixed-assets accounts of the mining establishment and were of a type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1963 were to be determined as "additions completed during the year plus construction in progress at the end of the year minus construction in progress at the beginning of the year." Reported capital expenditures were to include work done on contract as well as by the mine forces. Expenditures for machinery and equipment were to include those made for replacement purposes, as well as those for additions to capacity. Excluded from such expenditures totals are costs of maintenance and repairs charged as current operating expense. Also excluded are expenditures for land and mineral rights.

Wherever applicable, separate figures were provided on expenditures for (a) development and exploration of mineral property, (b) preparation plant construction and other construction, (c) new machinery and equipment, and (d) used plant and used equipment acquired from others. The 1958 and 1954 minerals censuses included comparable statistics. For 1939, data were obtained separately on (b), (c), and (d). For 1929 and 1919, data were obtained on (a).

The census figures for capital expenditures differ from estimates published on the basis of the Office of Business Economics-Securities and Exchange Commission sample survey not only because of the sampling variations but also, to a greater extent, because of the differences in scope of the surveys. Whereas census figures cover all mining establishments, but exclude all establishments of reporting companies which are not classified in the mineral industries, the OBE-SEC figures are based on reports for an entire company, classified on the basis of its principal activities. For this reason, many large metal mining and oil and gas establishments, for example, are included in the OBE-SEC tabulations as part of manufacturing. Both series, however, exclude expenditures at establishments owned by Federal or State governments but operated under lease or contract by private companies.

## 24. INDIVIDUAL PRODUCTS

In the 1963 Census of Mineral Industries, information on output of about 225 individual mineral product items was collected. This number of items was about the same as that collected for 1958, but it represented a reduction from about 760 individual products included in the 1954 minerals census when joint forms with the Bureau of Mines were used.

In general, the 1963 and 1958 minerals censuses figures were confined to separate totals for each crude and each prepared mineral. Where signi-

licait, separate shipments figures were also obtained for crude minerals going to preparation plants and those going to consumers.

Figures were collected on both quantity and value of shipments. Shipments include commercial shipments and transfers of products to other operations of the same company. For products which are used to a significant extent within the same establishment for power or heat, and for minerals mined and prepared in the same establishment, total production or separate data on production for such uses were collected. Typically, production was also collected for products for which there are usually significant differences between total production and total shipments as a result of stock changes.

For service industries, the amount received or due for services performed during 1963 was collected as a measure of output. For mine operators who also perform services, the amount received for such services was added to the total value of products shipped to determine total "value of shipments and receipts" for each establishment.

Table 6A of each report for individual industries provides the national and regional total shipments from all industries for each of the products primary to the industries covered in the report. Table 5 provides separate totals for the value of primary products of each industry shipped by the primary industry and the amount shipped by other industries.

## 25. INDEXES OF PRODUCTION AND UNIT VALUE

Based on the type of quantity and value statistics shown in table 6A of the industry chapters, indexes of production and unit value (value of shipments divided by quantity of shipments) have been constructed for the primary products of the industry produced or shipped by all producers, including those in other industries. These indexes are shown in table 6B of the industry chapters. The 1958 unit values were used as weights in construction of a weighted aggregative production index. A unit-value index, weighted by quantity of production or shipments, was also constructed. The latter index was used, where necessary, to deflate value of shipments of products for which no quantity data were available. The indexes for all primary products combined are net indexes and exclude the production of crude minerals used to produce prepared minerals.

A special census report will be issued in cooperation with the Federal Reserve Board on Indexes of Production, consolidating the information shown in the 6B tables into group and total indexes and discussing in some detail the objectives and methodology of the indexes and the data problems and limitations. That report will contain revisions of the table 6B indexes where necessary.

## 26. SHIPMENTS, PRODUCTION, CUSTOM MILLING, AND NET SHIPMENTS

Shipments figures include all products physically shipped from the establishment during 1963, including material withdrawn from stockpiles and products shipped on consignment, whether or not

sold in 1963. Prepared materials include preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or prepared on a custom basis, the company was requested to include, in addition to direct costs of production, a reasonable proportion of company overhead and profits. All values were requested f.o.b. the establishment reported.

The figures for "value of shipments and receipts" of an industry include, for all establishments classified in the industry, (a) the value of all "primary" products of the industry, (b) the value of "secondary" products which are primary to other industries, (c) the receipts for contract work done for others (except custom milling), and (d) the value of products purchased and resold without further processing. Receipts for custom milling are omitted from this total and shown separately to avoid duplication with the value of custom milled ores included in (a) or (b).

For industry and industry group totals, some duplication is introduced by the inclusion of materials transferred from one establishment to another for mineral preparation. In general, where this duplication is significant, figures are shown both for "gross" and "net" shipments. The net shipments are obtained by subtracting the value of crude minerals transferred to other establishments for preparation from the gross shipments. Wherever value of shipments is shown without further specification, it represents gross shipments.

For years prior to 1954, data on shipments were not collected. Instead, the report forms requested data on the quantity and value of production. In general, the data for these years were edited to represent net production, excluding duplications due to mining and later preparing the same material in the same industry.

Another source of duplication in the industry totals, for value of shipments, particularly in the major group totals, is the inclusion of the cost of contract work performed by one establishment for another as well as the value of products produced by the assistance of this contract work. Only part of the contract work performed during a given year, however, results in production during that year. Another significant portion results in capital additions to the industry. It was not possible to segregate these two types of contract work in the census tabulations and the exclusion of all receipts for contract work in a computation of net shipments must be considered an over adjustment. Of the types of contract work classified in the mining services industries, only contract mining of minerals and contract pumping of wells would always warrant deduction as duplication in the value of shipments totals, and these items amounted to only 3 percent of the total receipts for contract work by minerals establishments in 1963.

A third element of duplication in the total value of shipments for all mineral industries and the major group totals for the fuel producing in-

from one mining establishment to another for use as power or heat. The total value of such fuels transferred in 1963 for use in all mineral industries, however, was only \$76 million, or less than 0.4 percent of the gross value of shipments for all mineral industries.

Table G shows, for major industry groups, gross shipments and two approximate computations of net shipments; the first, adjusted only for the transfer of minerals from one establishment to another for preparation and for purchases for resale without preparation, and the second, adjusted also by exclusion of all receipts for contract work. This second adjustment, for the reasons indicated above, is made only in table G of the 1963 census reports.

## 27. VALUE ADDED IN MINING

For 1963, 1958, and 1954, this measure is computed by subtracting the cost of supplies, minerals received from other establishments for preparation, purchased fuels and electric energy, contract work, and purchased machinery installed from the value of shipments and receipts and capital expenditures. This statistic avoids the duplication in value of shipments which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure of value added not only in mineral production, but also in the development of mineral properties. For these reasons, it is considered to be the best value measure for comparing the relative economic importance of mining among industries and geographic areas.

"Value of shipments and receipts," used in this calculation, includes the shipments of all products of the mining establishment, together with receipts for work done for others. "Capital expenditures" includes expenditures for development of mineral properties as well as for new construction and major alterations of preparation plants and other structures and expenditures for new and used machinery and equipment. The "costs" used in this calculation include costs charged to both the current and capital accounts. Both the shipments and costs figures include products bought and resold in the same condition.

not available for capital expenditures or for costs of capitalized supplies and equipment. However, a rough measure of value added in mining is computed for these years by subtracting from the value of shipments and receipts the cost of supplies, minerals received for preparation, fuels, purchased electric energy and contract work.

Value added in mining differs from "national income originating in mining," as presented in the national income estimates compiled by the Office of Business Economics, Department of Commerce. The latter measure is the sum of factor costs incurred by an industry in production. It excludes, in addition to cost of materials, such costs as depreciation charges, State and local taxes (other than corporate income taxes), allowance for bad debts, and purchases of services from other economic sectors, such as contract services classified in other sectors, services of engineering and management consultants, advertising, telephone and telegraph expenses, insurance, royalties, etc. It is, therefore, a more "net" concept for value added in mineral production than that used in the minerals census. On the other hand, the OBE figures do not include a measure of value added in development of mineral properties.

## 28. ENERGY USED

The 1963 Census of Mineral Industries obtained data on the quantity and cost of fuels and electric energy used in mining which are comparable, in general, to such data obtained in the 1958, 1954, 1939, 1929, and 1919 censuses. Separate quantity and cost figures were provided on purchased coal, distillate fuel oil, residual fuel oil, gas, gasoline, and electric energy. A cost figure was obtained for other fuels. The breakdown between distillate and residual fuel oil for 1963 is being published for most industries for the first time; the gasoline figures were collected for the first time since 1939.

To supplement the data on energy and energy materials purchased, data were obtained on the quantity of such items produced and used at the same establishment. In the minerals census, such

Table G. GROSS AND APPROXIMATE NET SHIPMENTS, BY MAJOR INDUSTRY GROUP: 1963

Industry group	Gross shipments (million dollars)	Net shipments (million dollars)	
		Adjusted for transfer of minerals <sup>1</sup>	Adjusted for transfer of minerals and for contract work <sup>1</sup>
All mineral industries.....	21,621	18,804	16,964
Metal mining.....	2,128	1,836	1,800
Anthracite mining.....	237	172	156
Bituminous coal and lignite mining.....	2,396	2,101	2,075
Oil and gas extraction.....	14,512	12,423	10,686
Nonmetallic minerals mining.....	2,347	2,273	3,247

<sup>1</sup>Adjusted also to exclude duplication of minerals transferred to other establishments in the same industry for resale without preparation.

data were obtained on coal, crude petroleum, and natural gas used at the producing establishment for power and heat; and on electric energy generated and used at the same mining operation. For electric energy, the figures actually collected represented total quantity generated (excluding generating-station use) and quantity of electric energy generated and sold. The difference between these two quantity figures represented electric energy generated and used.

Experience, based on past censuses, indicates that the major portion of the information compiled on detailed fuels is reported by relatively large establishments. For this reason, inquiries on fuel detail were not directed to establishments reported on short forms. As a result of these limitations and because of some incomplete reporting, a total of \$42 million was tabulated as "undistributed" fuels costs, amounting to approximately 14 percent of the total fuels cost tabulated for 1963.

In order to provide total figures for energy used by industry, geographic area, and type of operation, the energy figures were reduced to a common unit of measure representing kilowatt-hours, the international unit of energy. These figures include an estimated kilowatt-hour equivalent for "other fuels" for which only "cost" was reported and for the "undistributed" fuels cost. The conversion factors used in computing these kilowatt-hour equivalents are as follows:

Coal.....	1 ton	=	7,677 kwh
Crude petroleum.....	1 barrel	=	1,700 kwh
Gas.....	1 MCF	=	307.7 kwh
Gasoline.....	1 gallon	=	36.4 kwh
Distillate fuel oil.....	1 barrel	=	1,707 kwh
Residual fuel oil.....	1 barrel	=	1,842 kwh
Other fuels and undistributed.....	\$.1	=	243 kwh

## 29. POWER EQUIPMENT

Totals for prime movers and electric motors are shown separately. The horsepower ratings for prime movers include information for such types of power equipment as internal combustion engines, steam and hydraulic turbines, and reciprocating steam engines. The totals for prime movers are further separated between those used for driving electric generators and those used for other purposes. The statistics for prime movers not driving generators include data for highway-type automobiles, trucks, and other equipment, but figures for such equipment are also shown separately. For 1963, as for 1954 (the last census in which horsepower data were collected), separate figures were obtained on "loading equipment," "transportation equipment," and "all other equipment" for all industries except oil and gas extraction. Under loading equipment are included such items as power shovels, dragline excavators, and scrapers for use underground or on the surface. Transportation equipment includes locomotives, tractors, trucks, and shaft hoists. Other equipment includes drills, compressors, machine tools, pumps, and preparation plant machinery.

The aggregate horsepower figure represents the unduplicated horsepower for total equipment available for use, and provides a measure of the mechanical power available in mining establishments. The figure is derived by adding together the horsepower of prime movers and of electric motors driven by purchased electric energy. To secure the latter figure, the total horsepower for electric motors was distributed, by establishment, into two categories: Motors driven by purchased electric energy and motors driven by energy generated at the establishment. For establishments which both generate and purchase electricity, the total horsepower for electric motors was prorated on the basis of the ratio of the net quantity purchased to the net total for electric energy used.

As in past censuses, respondents were requested to report horsepower of standby equipment as well as equipment in operation at the end of the year, including all prime movers and motors in both mobile and stationary equipment.

## 30. RELATION OF LABOR COSTS TO OUTPUT

Three analytical tables are included in the report to relate labor requirements to output measures:

(1) Table 8 of the industry chapters shows general statistics for establishments classified by output per man-hour, with output generally measured in physical units (such as tons of coal) of shipments of the primary products of the industry. Where feasible, the distribution by output per man-hour is shown separately for major types of operation, since it differs significantly for open pits as compared with underground mines, and for a mine only, a mine and plant, and a plant only. Meaningful ratios of output per man-hour could not be computed when a significant portion of the production resulted from the work of proprietors or contractors for whom man-hours figures are excluded, or where a significant portion of the man-hours of workers was spent in development or exploration work. Such operations were included as "unclassified."

(2) Table 9 of the industry chapters shows general statistics for establishments classified by the ratio of payroll of all employees to value added in mining. This distribution was shown by geographic divisions insofar as feasible.

(3) Table 10 of the industry chapters shows a frequency distribution of establishments by classes of value added in mining per employee, by employment size of establishment.

In comparing labor costs with value added in tables 9 and 10, it should be noted that value added as here computed includes many expenses for which no separate data were obtained in the 1963 minerals census, such as taxes, royalties, interest paid, and nonpayroll benefits to employees.

One of the most striking developments in the mineral industries in recent years has been the rapid decline in labor requirements associated with

**Table H. VALUE ADDED PER MAN-HOUR, ENERGY USED AND AGGREGATE HORSEPOWER PER PRODUCTION WORKER, BY MAJOR INDUSTRY GROUP: 1963**

Industry group and year	Value added per man-hour (dollars)	Energy used per production worker (1,000 kwh equivalent)	Aggregate horsepower per production worker
All mineral industries.....1963..	16.35	906	110
.....1958..	12.39	717	(NA)
.....1954..	9.23	576	63
Metal mining.....1963..	11.29	513	98
.....1958..	8.66	384	(NA)
.....1954..	6.36	262	63
Anthracite mining.....1963..	6.17	261	68
.....1958..	5.33	194	(NA)
.....1954..	4.08	218	46
Bituminous coal and lignite mining....1963..	7.38	135	53
.....1958..	6.03	91	(NA)
.....1954..	4.36	77	32
Oil and gas extraction.....1963..	27.73	1,716	147
.....1958..	20.52	1,451	(NA)
.....1954..	15.61	1,211	90
Nonmetallic minerals mining.....1963..	8.20	574	115
.....1958..	6.79	501	(NA)
.....1954..	5.49	451	79

(NA) Not available.

a rapid increase in energy and horsepower use while production, in general, increased. Table H shows value added per man-hour for the last three census years, by major industry group, as compared with energy used per production worker and aggregate horsepower per production worker.

### III. SPECIAL REPORTS AND PROCEDURES

#### 31. SPECIAL REPORTS SHOWN IN VOLUME I, SUMMARY AND SUBJECT STATISTICS

In Volume I, there are several special summary reports on size of establishments, type or organization, employment and related statistics, type of operation, power equipment, fuels and electric energy, supplies used, and water use. Most of these subjects are merely summarizations or special compilations of data reported on the standard census forms and presented in the industry or area chapters.

The following chapters, which are recompilations of basic data reported on the census of mineral industries report forms, should be noted.

**Size of Establishment.**—Each establishment in the census is coded, not only by industry and geographic location, but also by its size, based on the average number of employees for the year. These size tabulations provide significant insight into the variations in operating ratios among plants within an industry and between industries. Information on the number of establishments, employment, payrolls, value added, value of shipments, and capital expenditures is presented for 10 employment size classes in each industry in Volume I, table 4, of the industry chapters, and in chapter 2 of the Summary reports.

**Type of Organization.**—Multiunit and single-unit establishments—Information on whether plants are independent or part of multiestablishment companies contributes significantly to knowledge of the structure of mining in the United States. The proportion of value added in mining accounted for by multiunit establishments has grown somewhat since 1954, but the employment proportions has not. (See table I.)

**Legal Form of Organization.**—Each establishment was asked to report the forms of organization of the company which operated it (e.g., corporation, partnership, proprietorship, cooperative). In chapter 3, Volume I, selected general statistics are shown for each 4-digit industry in each of these forms of business organization. Cooperatives are combined with "other" forms of business organization to avoid the disclosure of information for individual companies. In mining, about half the establishments are operated by corporations, but these establishments account for about 89 percent of value added in mining.

**TABLE I. MULTIUNIT ESTABLISHMENTS AS A PERCENTAGE OF TOTAL MINING**

Year	Employees	Value added in mining
1963.....	67	86
1958.....	69	82
1954.....	67	79



## 32. IMPUTATION OF DATA

Short forms were used to obtain information for about 17,000 small establishments. In these forms less detail was obtained on selected items, such as employment, cost of supplies, fuels, electricity, and on the status of wells and drilling costs for oil and gas operations. Certain items were omitted entirely, such as man-hours.

To obtain industry totals, estimates were prepared for detail omitted for such establishments on the basis of information reported on long forms for similar operations.

Imputation of missing items was made feasible by use of the Census Bureau's high-speed electronic computer. The procedures for imputation were of two types. For short-form respondents, production, development, and exploration workers and their wages were imputed from fixed ratios specified in advance from historical relationships of these items to total employees and total payroll. For other items (e.g., capital expenditures), the imputation was made on the basis of historical relationships of the items to value of shipments or other factors.

For industries characterized by large establishments, the percentage of imputation of general measures such as employment and payrolls, cost of supplies, expenditures, and the like is very small; for industries in which small establishments account for a large portion of the totals, imputations may amount to 10 percent or more.

## 33. CONFIDENTIALITY OF DATA FOR INDIVIDUAL COMPANIES

The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In the 1963 census, as in previous censuses, precedence was given to geographic regions and divisions over individual States in applying disclosure rules; similarly, States took precedence over counties. In tables showing industry detail, major industry group (2-digit) totals were given precedence over industry group (3-digit) totals which, in turn, had precedence over individual (4-digit) industries.

Such order of precedence was used because (1) it was considered preferable to show regional data for an industry, even at the cost of withholding data for another (usually the least important) State in a region, rather than to show all publishable data for the individual States and group the disclosure States throughout the United States in an "all other" category, as was frequently done in the 1939 and earlier censuses; and (2) by giving precedence to industry group statistics over individual industries within each State, the extent to which individual statistics can be compared within the SIC industry classification framework is greatly increased.

For each State not shown separately in table 2 of the industry chapter, a footnote gives the number of establishments and either an employment range or the actual employment figure. The employment is shown in a range if the State had less than 1,000 employees and the employment data represented the total for only one or two companies, or if the exact figure would permit deriving (by subtraction) the number of employees in other States represented by only one or two companies. In addition, figures for States with less than 50 employees, in general, are shown only in the footnote together with the number of establishments and employment in a range.

In the Area Volume, figures are not shown for a county or for an industry within a State if the publication of such statistics would disclose information for individual companies. In table 4 of that Volume, however, the number of establishments, distributed by employment size, is shown for every county by 3-digit industry group.

For industries with few establishments or considerable geographic concentration, it has frequently been necessary to use geographic regions broader than the traditional nine census divisions, in order to show all establishments by some geographic grouping. For this purpose the following combinations of Census divisions have been used:

NORTHEAST	SOUTH
New England	South Atlantic
Middle Atlantic	East South Central
	West South Central
NORTH CENTRAL	WEST
East North Central	Mountain
West North Central	Pacific

## 34. ABBREVIATIONS

The following abbreviations and symbols occur frequently in tables and footnotes:

-	Zero
X	Not applicable
NA	Not available
n.e.c.	Not elsewhere classified
kwh	Kilowatt-hours
D	Withheld to avoid disclosing figures for individual companies
SIC	Standard Industrial Classification

Other abbreviations, such as lb. and bbl., are used in the customary sense. Where the term "tons" is used alone, it refers to short tons of 2,000 pounds; where the figures are expressed in tons of 2,240 pounds, the unit of measure is specified as "long tons."

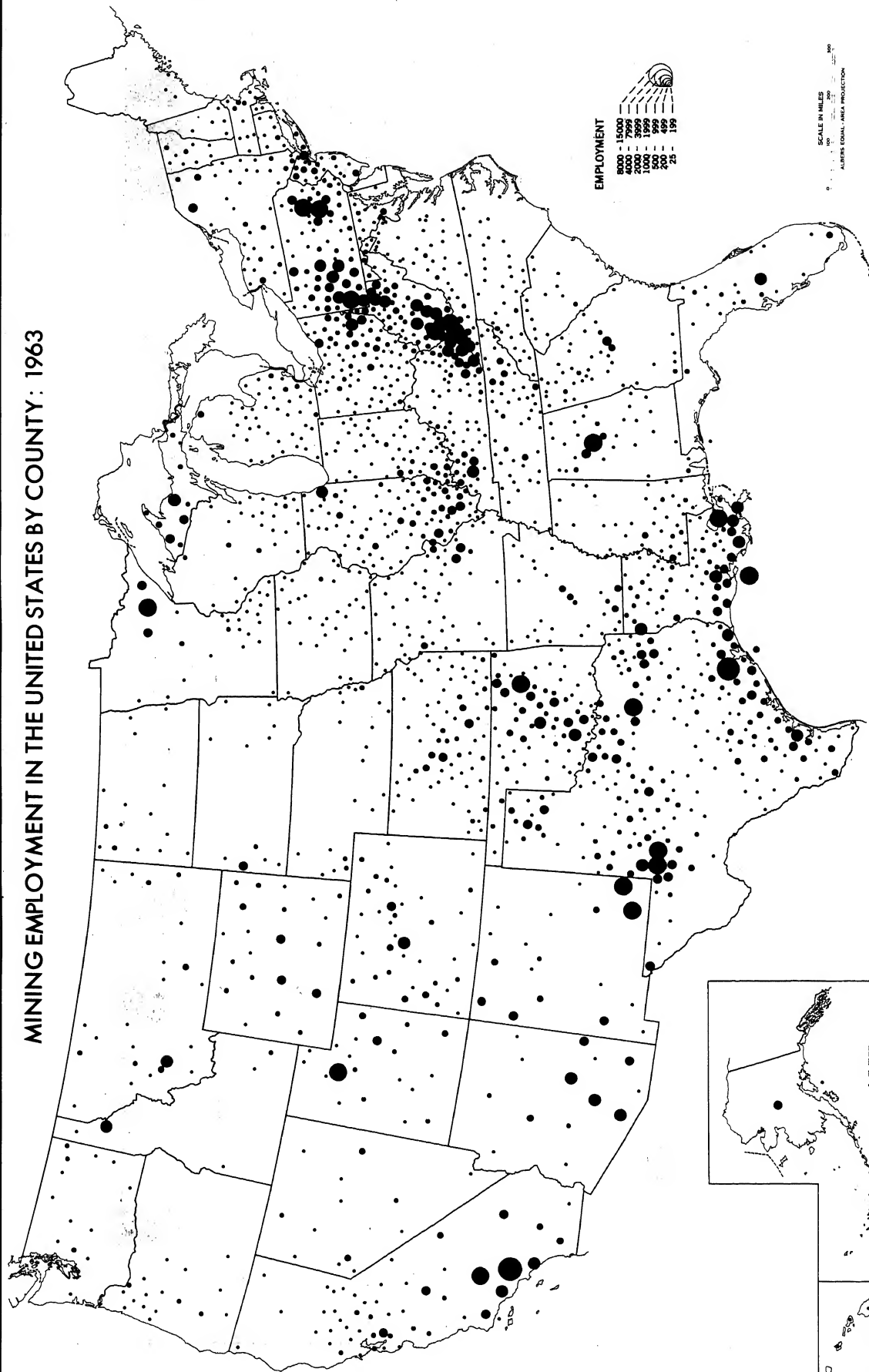
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# MINING EMPLOYMENT IN THE UNITED STATES BY COUNTY: 1963



# MINING EMPLOYMENT IN THE UNITED STATES: 1860-1963

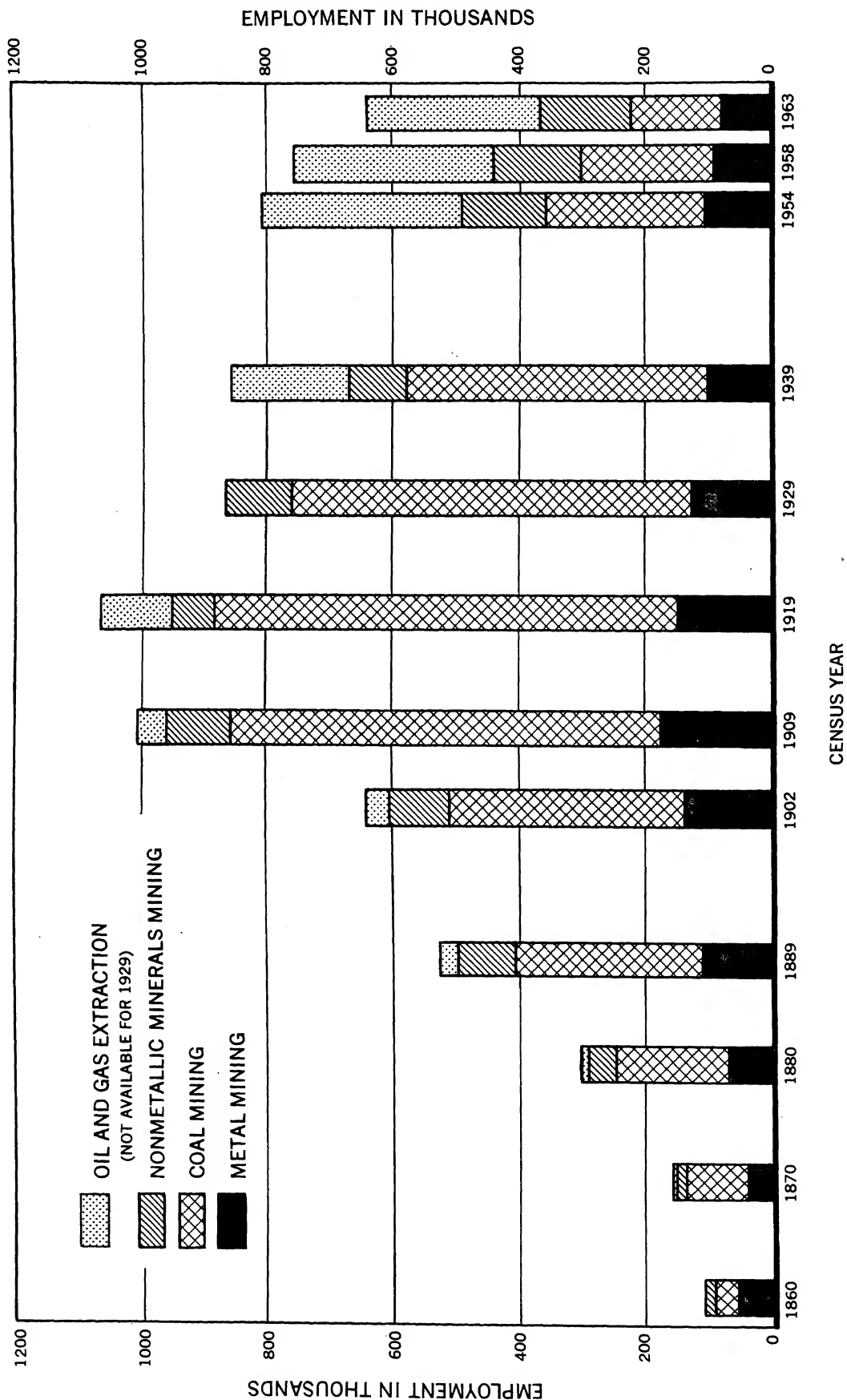


Chart 3

# PAYROLL, CAPITAL EXPENDITURES, AND VALUE ADDED IN MINING: 1880-1963

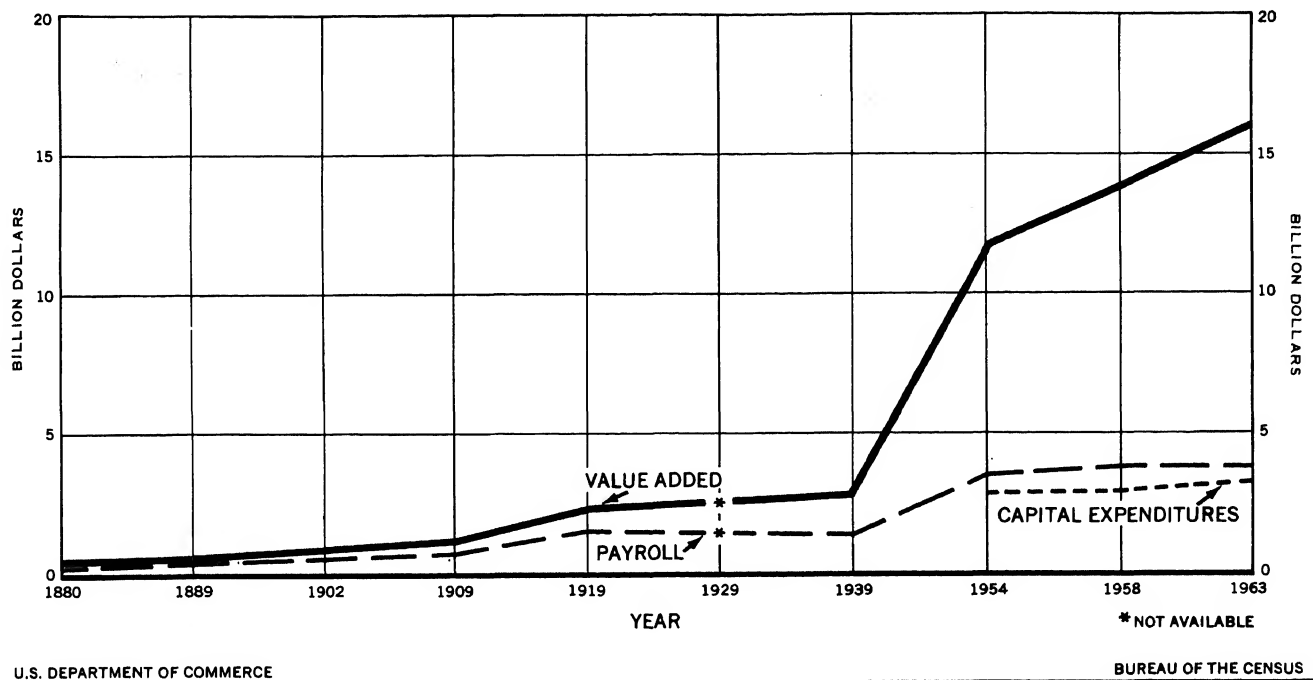
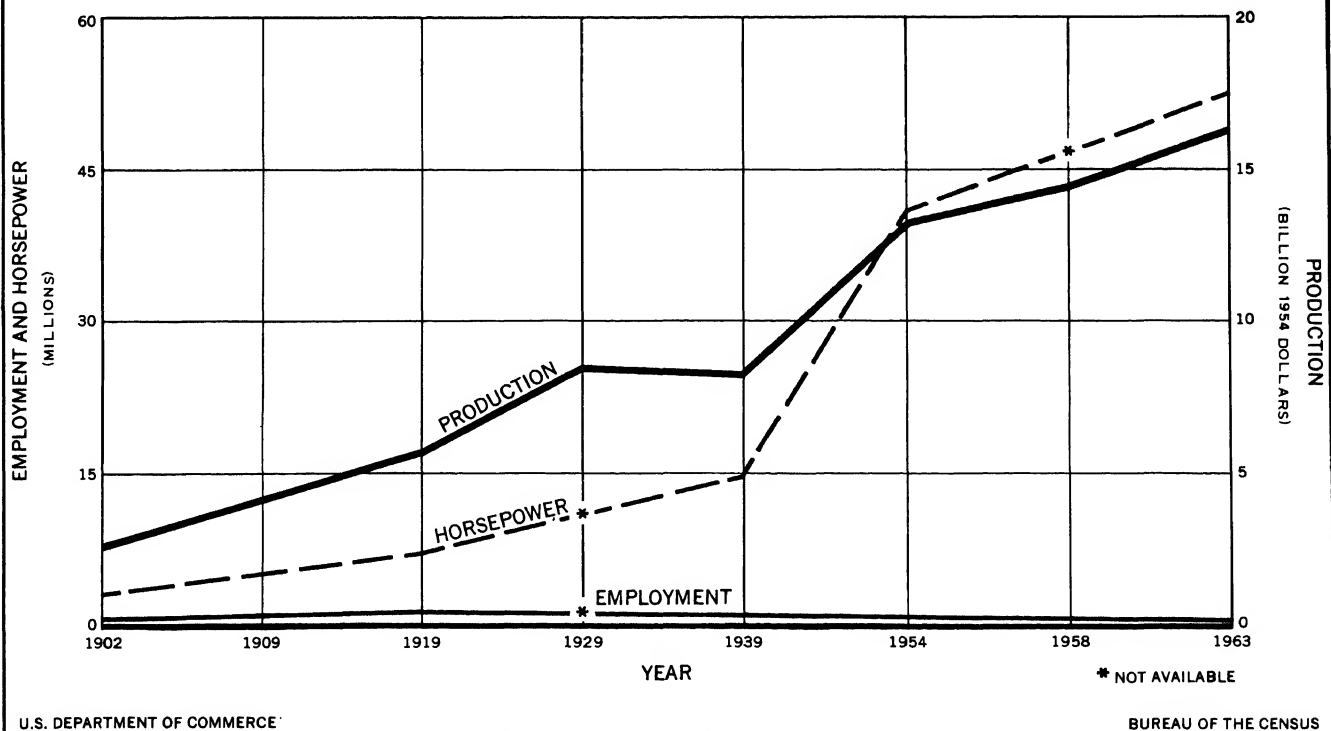
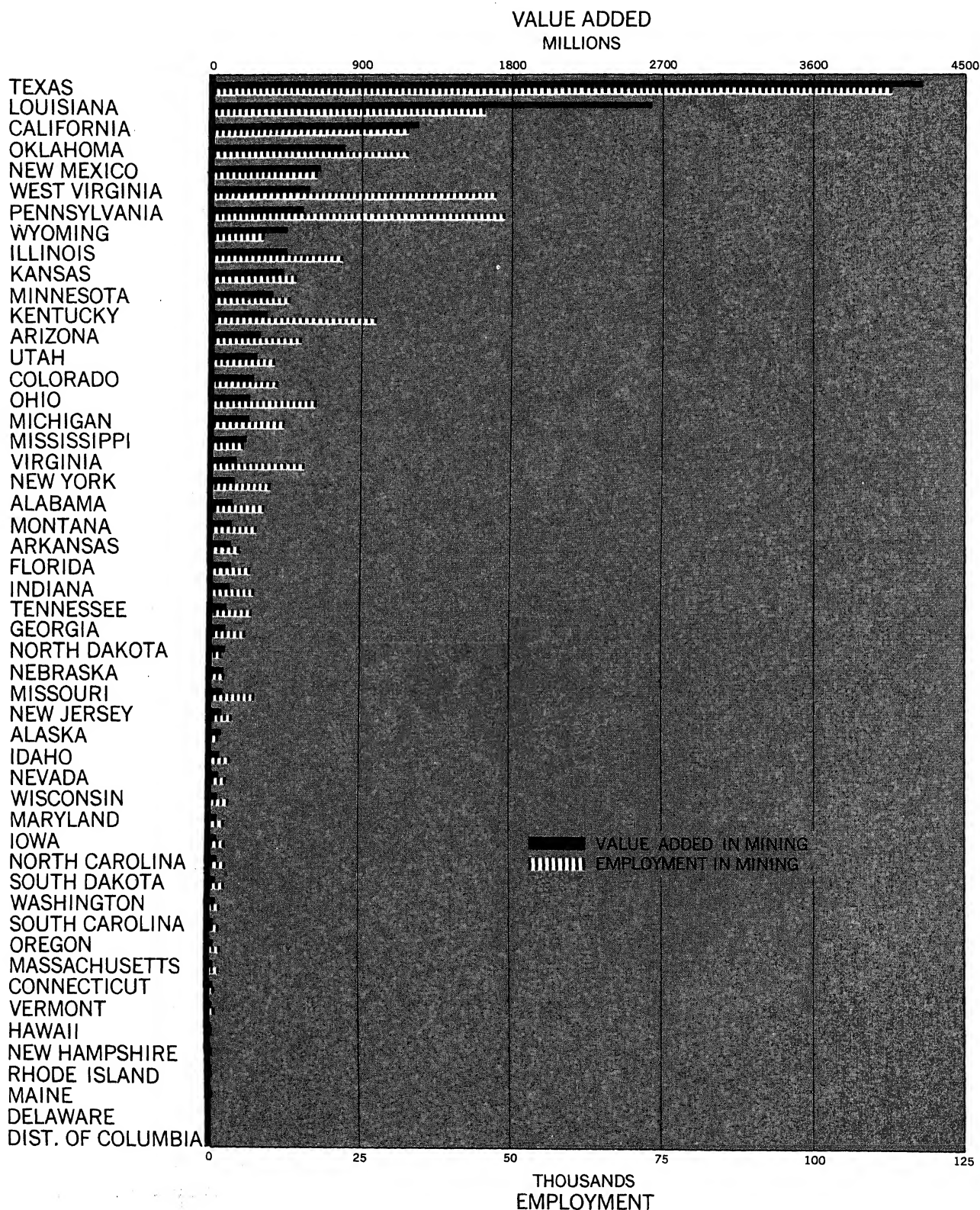


Chart 4

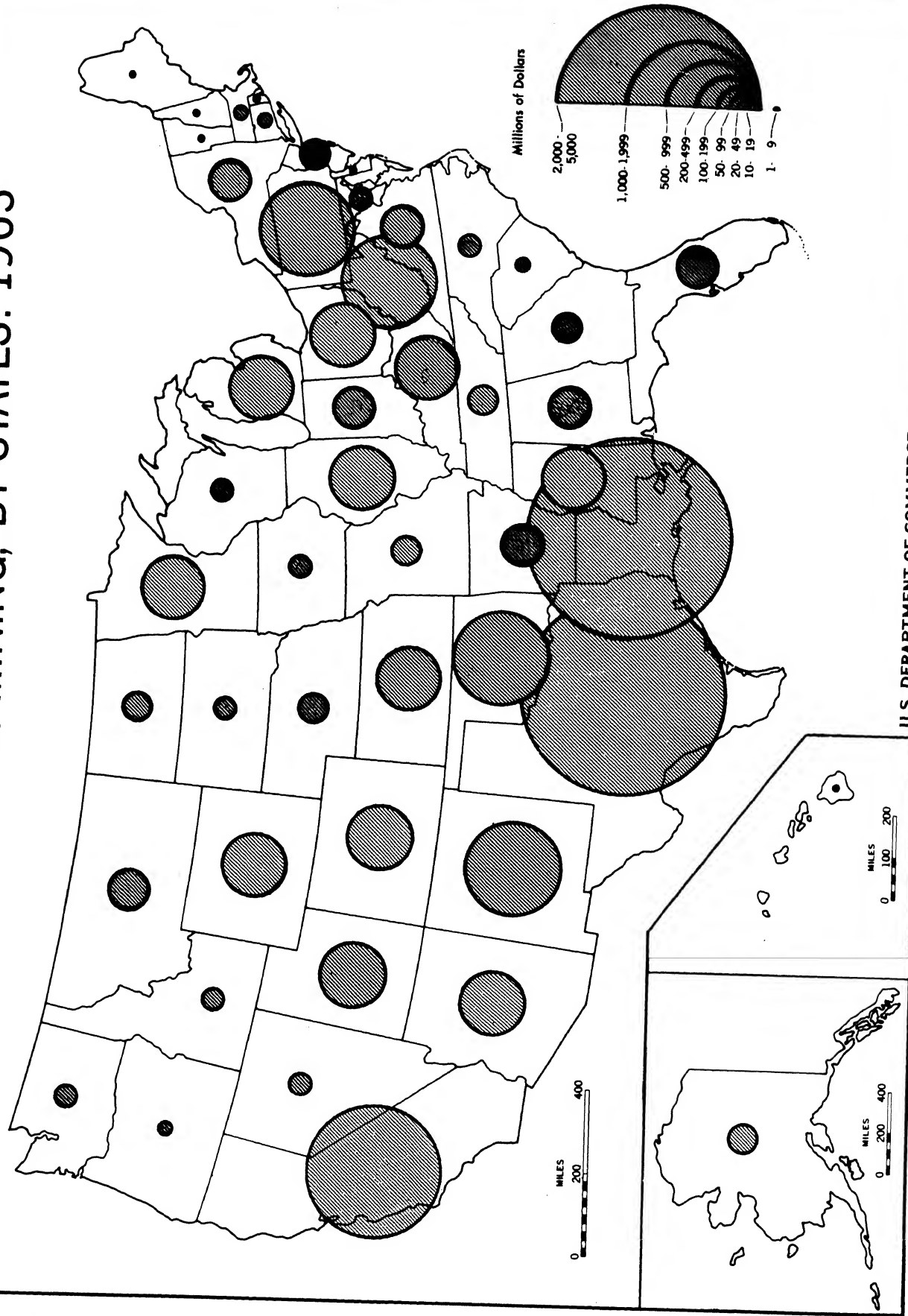
# EMPLOYMENT, HORSEPOWER, AND PRODUCTION IN MINING: 1902-1963



# STATES RANKED BY VALUE ADDED AND EMPLOYMENT IN MINING: 1963



# VALUE ADDED IN MINING, BY STATES: 1963



## PAYROLL IN MINING, BY STATES: 1963

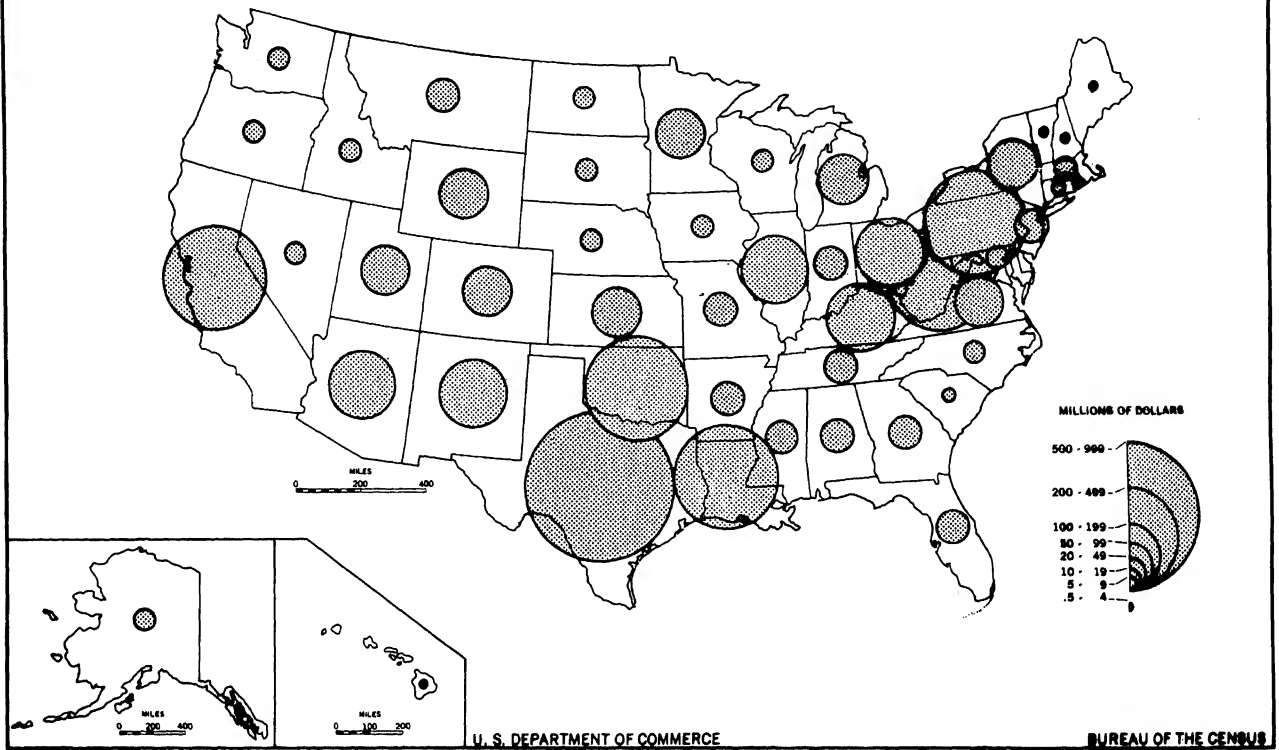


Chart 8

## CAPITAL EXPENDITURES IN MINING, BY STATES: 1963

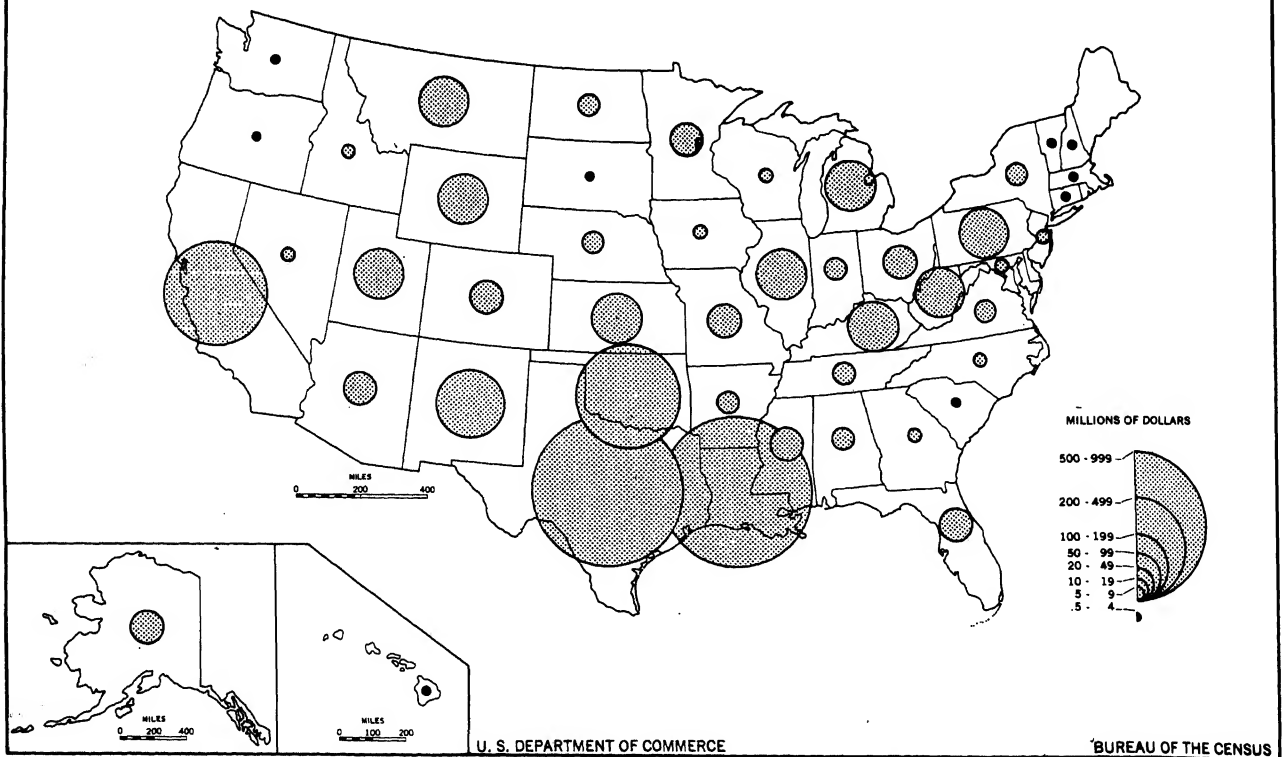


Chart 9

VALUE ADDED PER MINING EMPLOYEE, BY STATES: 1963

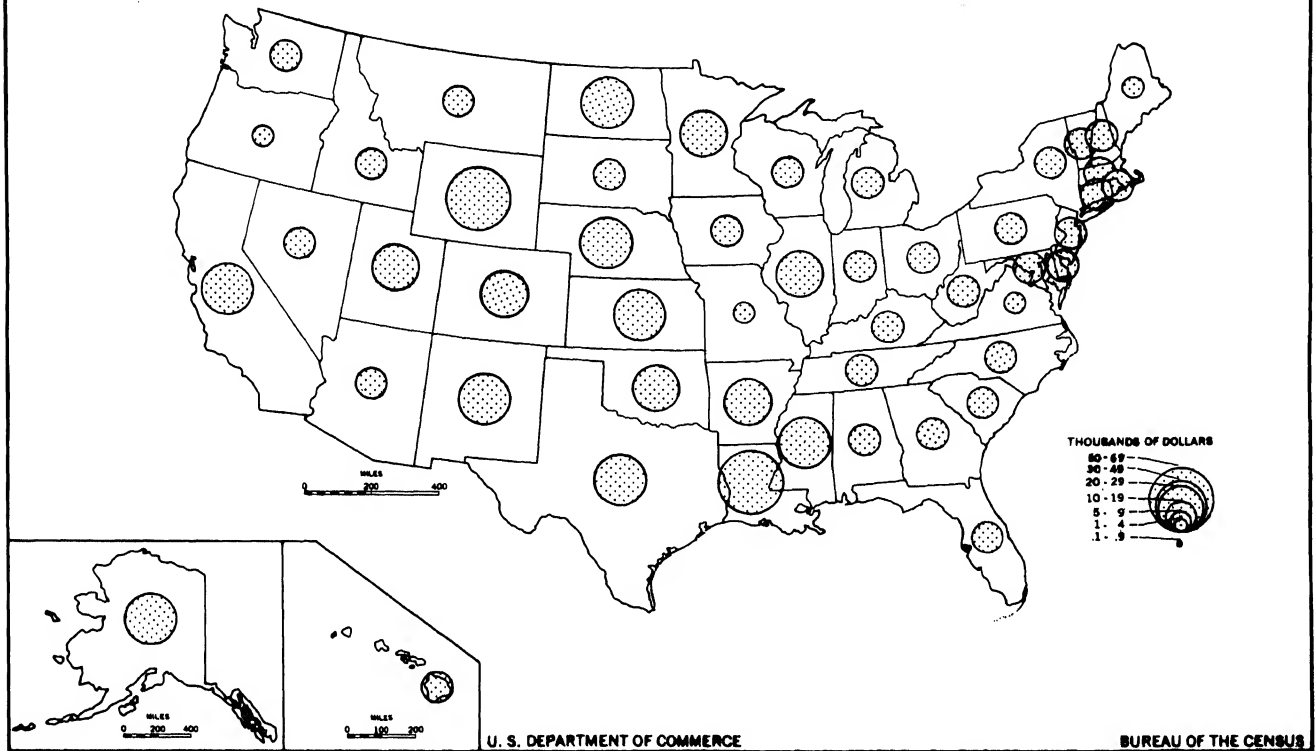




TABLE 1. General Statistics:

(For more detailed historical statistics, see table 1 of the General Summary report of the 1954 Census of

Kind of operation and year		Establishments, number		All employees		Production, development, and exploration workers			Value added in mining
		Total	With 20 or more employees	Number	Payroll	Number	Man-hours	Wages	
					(\$1,000)		(1,000)	(\$1,000)	(\$1,000)
Mineral industries only:									
1	1963.....	38,651	5,499	615,572	3,742,469	481,466	972,983	2,679,515	15,910,015
2	1958.....	36,392	6,045	733,941	3,749,015	565,392	1,080,512	2,622,980	13,385,195
3	1954.....	37,641	6,204	787,127	3,394,844	648,341	1,251,909	2,579,744	211,558,664
Including operations in manufactures:									
All operations:									
4	1963.....	40,532	5,743	637,001	3,842,987	501,734	1,013,821	2,773,193	16,231,255
5	1958.....	37,966	6,295	754,882	3,835,608	585,159	1,119,489	2,702,484	13,685,405
6	1954 <sup>6</sup> .....	38,858	6,466	807,387	3,466,101	667,821	1,291,472	2,646,825	211,752,300
7	1939 <sup>7</sup> .....	<sup>8</sup> 25,023	(NA)	856,389	1,174,771	774,130	1,287,852	970,546	2,679,828
8	1919 <sup>9</sup> .....	22,348	(NA)	1,065,466	1,461,259	989,804	(NA)	1,309,509	2,364,654
9	1909 <sup>9</sup> .....	25,692	(NA)	1,005,841	637,112	960,460	(NA)	582,209	939,139
10	1902 <sup>11</sup> .....	<sup>8</sup> 52,088	(NA)	621,846	416,795	<sup>12</sup> 581,985	(NA)	376,218	628,359
11	1889.....	(NA)	(NA)	542,584	227,129	(NA)	(NA)	(NA)	334,040
12	1880.....	(NA)	(NA)	295,991	94,772	(NA)	(NA)	(NA)	216,790
Excluding oil and gas extraction industries:									
13	1963.....	19,290	3,026	365,525	2,098,276	309,758	616,473	1,680,145	5,211,459
14	1958.....	19,444	3,603	441,966	2,134,925	371,158	679,233	1,691,246	4,652,912
15	1954 <sup>6</sup> .....	21,267	3,698	491,579	2,003,249	432,303	799,679	1,670,040	134,078,606
16	1939 <sup>7</sup> .....	<sup>8</sup> 13,794	(NA)	670,239	856,389	625,134	1,022,824	750,111	1,437,355
17	1929 <sup>14</sup> .....	10,996	(NA)	865,551	1,238,918	812,220	(NA)	1,099,895	1,955,804
18	1919 <sup>9</sup> .....	12,377	(NA)	953,855	1,292,044	896,145	(NA)	1,174,112	1,779,723
19	1909 <sup>9</sup> .....	17,494	(NA)	987,107	626,865	946,800	(NA)	578,037	848,154
20	1902 <sup>11</sup> .....	<sup>8</sup> 20,352	(NA)	594,288	395,476	<sup>12</sup> 559,547	(NA)	359,826	569,337
21	1889.....	21,807	(NA)	513,361	216,846	(NA)	(NA)	(NA)	318,722
22	1880.....	7,395	(NA)	284,514	87,593	(NA)	(NA)	(NA)	199,093

Note: For explanation of column captions see Introduction.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, includes the estimated value of minerals produced and used in the same establishment in making manufactured products.<sup>2</sup>Excludes data for the Uranium-Radium-Vanadium Ores Industry.<sup>3</sup>Excludes the cost of natural gas processed at natural gas liquids plants, but includes the estimated value prior to processing of liquids contained in such gas. See also footnote 2.<sup>4</sup>For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, the cost of contract work is included with the cost of supplies, purchases for resale, and purchased fuels and electric energy.<sup>5</sup>Excludes data for crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments. For horsepower in 1963, also excludes data for dimension stone in manufactures.<sup>6</sup>Excludes data for sand and gravel mining operations in manufacturing establishments.

## 1963 and Earlier Years

Mineral Industries, Vol. I. For all years prior to 1939, excludes contract service operations)

Selected expenses (\$1,000)				Value of net shipments and receipts <sup>1</sup>	Capital expenditures	Energy used (kwh equivalent)		Horsepower rating of power equipment	
Supplies, purchases for resale, and purchased fuels and electric energy	Minerals received for preparation	Contract work	Purchased machinery installed			Total	Per production worker		
				(\$1,000)	(\$1,000)	(million)	(1,000)	(1,000)	
3,261,942	2,670,235	1,918,322	1,123,639	18,804,429	3,263,615	436,435	906	52,772	1
2,885,122	1,756,351	1,861,899	1,017,578	16,373,083	2,804,104	405,631	717	(NA)	2
2,347,709	<sup>3</sup> 708,930	1,828,519	1,214,263	<sup>2</sup> 14,226,176	2,726,171	373,168	576	40,877	3
<sup>4</sup> 3,346,847	2,673,723	<sup>4</sup> 1,918,765	<sup>5</sup> 1,127,023	19,210,458	<sup>5</sup> 3,267,558	<sup>5</sup> 436,810	<sup>5</sup> 893	<sup>5</sup> 52,772	4
<sup>4</sup> 2,944,092	1,758,277	<sup>4</sup> 1,862,759	<sup>5</sup> 1,019,892	16,728,989	<sup>5</sup> 2,806,608	<sup>5</sup> 406,110	<sup>5</sup> 708	(NA)	5
<sup>4</sup> 2,392,777	<sup>3</sup> 710,442	<sup>4</sup> 1,829,153	<sup>5</sup> 1,216,036	<sup>2</sup> 14,465,256	<sup>5</sup> 2,728,080	<sup>5</sup> 373,770	<sup>5</sup> 553	<sup>5</sup> 41,045	6
531,992	(NA)	220,984	(NA)	3,432,804	(NA)	224,898	291	14,160	7
655,188	35,905	82,697	(NA)	3,138,444	(NA)	<sup>10</sup> 250,624	253	6,816	8
243,580	28,885	32,320	(NA)	1,215,039	(NA)	(NA)	(NA)	4,723	9
120,867	(NA)	23,332	(NA)	772,558	(NA)	(NA)	(NA)	2,753	10
85,551	(NA)	6,720	(NA)	426,311	(NA)	(NA)	(NA)	(NA)	11
31,447	(NA)	3,730	(NA)	251,967	(NA)	(NA)	(NA)	(NA)	12
<sup>4</sup> 1,545,953	719,848	<sup>4</sup> 277,252	<sup>5</sup> 478,950	6,787,062	<sup>5</sup> 715,866	<sup>5</sup> 107,466	347	<sup>5</sup> 24,463	13
<sup>4</sup> 1,357,358	765,891	<sup>4</sup> 297,564	<sup>5</sup> 364,751	6,071,942	<sup>5</sup> 612,561	<sup>5</sup> 95,750	258	(NA)	14
<sup>4</sup> 1,091,849	<sup>2</sup> 537,527	<sup>4</sup> 270,119	<sup>5</sup> 350,969	<sup>13</sup> 5,235,311	<sup>5</sup> 499,876	<sup>5</sup> 88,657	205	<sup>5</sup> 20,941	15
317,652	(NA)	17,966	(NA)	1,772,973	(NA)	77,131	123	9,059	16
419,113	(NA)	17,914	86,733	2,392,831	(NA)	133,790	165	7,584	17
436,055	7,091	12,595	(NA)	2,235,464	(NA)	<sup>10</sup> 209,193	233	4,989	18
187,172	19,429	15,192	(NA)	1,050,518	(NA)	(NA)	(NA)	3,492	19
95,901	(NA)	5,054	(NA)	670,292	(NA)	(NA)	(NA)	1,739	20
62,861	(NA)	6,720	(NA)	388,303	(NA)	(NA)	(NA)	(NA)	21
28,273	(NA)	(NA)	(NA)	227,366	(NA)	(NA)	(NA)	(NA)	22

<sup>7</sup>Except for value of shipments and value added, excludes data for dimension stone dressing plants operated in conjunction with quarries. The value added in dressing stone at such operations was \$7,913 thousand; this value has been included in the value of shipments and value added in mining.

<sup>8</sup>Represents number of mines and quarries, number of natural gas liquids plants, number of crude petroleum and natural gas establishments, and for mining services industries, number of operating companies.

<sup>9</sup>Excludes data for sand and gravel operations and for stone quarries operated as parts of cement and lime plants. In 1929, there were 957 such sand and gravel establishments, with products valued at \$102,312 thousand, and 252 such stone quarries, with products valued at \$31,032 thousand. See also footnote 14.

<sup>10</sup>Excludes purchased electric energy. For "All operations" in 1939, the quantity of purchased electric energy amounted to only 3 percent of the total kwh equivalent of energy used; and for "Excluding oil and gas extraction industries" in 1929, to only 4 percent.

<sup>11</sup>Includes data for lime plants producing lime valued at \$9,336 thousand. Excludes data for sand, gravel, common clay, and shale mining operations and for stone quarries at cement plants.

<sup>12</sup>Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.

<sup>13</sup>Includes data for oil and gas extraction operations in Alaska. See also footnote 2.

<sup>14</sup>Excludes data for common clay and shale operations. In 1939, there were 609 such mines with products valued at \$6,341 thousand.

TABLE 2. Detailed Statistics by Industry

Ind. code	Industry group and industry	Number of operating companies	Establishments (number)				Value of shipments and receipts (\$1,000)	Value of net shipments and receipts (\$1,000)	Value added in mining (\$1,000)	Persons engaged (number)					Man-hours worked by production, development, and exploration workers (1,000)
			Total	With 20 or more employees	Including mining operations	Including preparation plants				Total	Production, development, and exploration workers	Other employees	Proprietors and firm members		
													Total	Performing manual labor	
	All mineral operations.....	32,884	40,532	5,743	33,395	9,533	122,030,055	119,210,458	16,231,255	665,997	501,734	135,267	28,996	19,049	1,013,821
	Mineral industries.....	31,470	38,651	5,499	31,514	9,301	21,620,538	18,804,429	15,910,015	644,568	481,466	134,106	28,996	19,049	972,983
	Included in manufactures...	1,507	1,881	244	1,881	232	1409,517	1406,029	321,240	21,429	20,268	1,161	(NA)	(NA)	40,838
	MAJOR INDUSTRY GROUPS														
10	Metal mining.....	1,308	1,614	298	1,465	539	2,128,246	1,835,665	1,418,217	78,245	62,182	15,028	1,035	866	125,663
11	Anthracite mining.....	1,025	1,069	102	946	153	236,511	172,064	120,540	13,159	10,324	1,462	1,373	1,307	19,544
12	Bituminous coal and lignite mining.....	5,841	6,305	1,166	5,999	1,408	2,396,419	2,100,721	1,606,688	138,450	118,629	15,233	4,588	3,774	217,642
13	Oil and gas extraction..	16,339	21,242	2,447	14,898	652	14,512,459	12,423,399	11,019,796	289,145	191,976	79,500	17,669	9,554	397,348
14	Nonmetallic minerals mining.....	8,497	10,302	1,730	10,087	6,781	12,756,420	12,678,609	2,066,014	146,998	118,623	24,044	34,331	33,548	253,624
	Mineral industries....	7,079	8,421	1,486	8,206	6,549	2,346,903	2,272,580	1,744,774	125,569	98,355	22,883	4,331	3,548	212,786
	Included in manufactures.....	1,507	1,881	244	1,881	232	1409,517	1406,029	321,240	21,429	20,268	1,161	(NA)	(NA)	40,838
	INDUSTRIES														
10	Metal mining.....	1,308	1,614	298	1,465	539	2,128,246	1,835,665	1,418,217	78,245	62,182	15,028	1,035	866	125,663
1011	Iron ores.....	115	208	101	197	118	762,234	709,352	549,305	23,119	18,102	4,981	36	33	34,524
1021	Copper ores.....	118	160	41	152	49	670,173	544,239	417,089	26,595	21,372	5,114	109	84	45,319
1031	Lead and zinc ores.....	163	205	46	196	54	135,965	119,785	84,373	9,510	7,822	1,600	88	79	14,781
	Lead ores subindustry..	117	125	13	124	16	50,743	44,750	34,046	4,381	3,401	919	61	59	5,948
	Zinc ores subindustry..	50	80	33	72	38	85,222	75,035	50,327	5,129	4,421	681	27	20	8,833
104	Gold and silver ores....	459	466	15	465	203	60,224	60,224	49,026	4,625	3,585	631	409	373	7,605
1042	Lode gold.....	199	201	5	200	34	26,632	26,632	21,312	2,563	2,091	306	166	131	4,544
1043	Placer gold.....	155	158	2	158	158	7,532	7,532	5,810	526	325	36	165	164	731
1044	Silver ores.....	105	107	8	107	11	26,060	26,060	526	1,536	1,169	289	78	78	2,330
1051	Bauxite.....	10	17	4	11	7	21,491	20,478	17,464	558	414	138	6	6	751
106	Ferroalloy ores.....	48	58	11	50	17	90,704	683,719	66,407	3,121	2,627	475	19	17	4,867
1062	Manganese ores.....	16	17	5	11	8	7,228	62,804	2,348	228	180	44	4	3	351
1064 and 1069	Tungsten ores and ferroalloy ores, n.e.c.	33	41	6	39	9	83,476	80,915	64,059	2,893	2,447	431	15	14	4,516
1081	Metal mining services...	82	83	17	(X)	(X)	32,360	32,357	24,736	2,243	1,891	315	37	28	4,018
109	Miscellaneous metal ores	346	417	63	394	91	355,095	265,511	209,817	8,474	6,369	1,774	331	246	13,798
1092	Mercury ores.....	49	49	3	49	38	3,658	3,658	2,569	344	279	37	28	27	610
1093	Titanium ores.....	7	8	7	8	8	22,033	22,033	15,021	997	846	151	-	-	1,721
1094	Uranium-radium-vanadium ores.....	266	335	51	318	37	326,370	6244,738	190,629	6,957	5,114	1,551	292	208	11,251
1099	Metallic ores, n.e.c..	25	25	2	19	8	3,034	62,407	1,598	176	130	35	11	11	216
11	Anthracite mining....	1,025	1,069	102	946	153	236,511	172,064	120,540	13,159	10,324	1,462	1,373	1,307	19,544
1111	Anthracite.....	987	1,026	85	946	153	220,973	156,526	110,527	12,047	9,331	1,361	1,355	1,291	17,758
1112	Anthracite mining services.....	41	43	17	(X)	(X)	15,538	15,538	10,013	1,112	993	101	18	16	1,786
12	Bituminous coal and lignite mining.....	5,841	6,305	1,166	5,999	1,408	2,396,419	2,100,721	1,606,688	138,450	118,629	15,233	4,588	3,774	217,642
1211	Bituminous coal.....	5,663	6,115	1,143	5,941	1,382	2,358,326	2,063,165	1,578,078	136,458	116,975	15,071	4,412	3,620	214,421
1212	Lignite.....	52	59	6	58	26	14,112	13,981	11,830	557	441	71	45	45	884
1213	Bituminous coal and lignite mining services	131	131	17	(X)	(X)	23,981	23,575	16,780	1,435	1,213	91	131	109	2,337
13	Oil and gas extraction.....	16,339	21,242	2,447	14,898	652	14,512,459	12,423,399	11,019,796	289,145	191,976	79,500	17,669	9,554	397,348
1311	Crude petroleum and natural gas.....	10,594	14,378	954	14,378	(X)	9,893,763	9,878,611	9,016,372	159,088	83,444	61,800	13,844	6,617	166,305
	Crude petroleum subindustry.....	9,384	12,326	789	12,326	(X)	8,600,086	8,589,719	7,812,956	138,431	71,707	54,135	12,589	5,812	142,847
	Natural gas subindustry	1,628	2,052	165	2,052	(X)	1,293,677	1,288,892	1,203,416	20,657	11,737	7,665	1,255	805	23,458
1321	Natural gas liquids.....	164	652	245	(X)	652	2,800,802	808,479	762,070	13,940	11,939	1,920	81	15	24,455
138	Oil and gas field services	5,915	6,212	1,248	520	(X)	1,817,894	1,736,309	1,241,354	116,117	96,593	15,780	3,744	2,922	206,588

See footnotes at end of table.

## Group and Industry: 1963

Principal expenses (\$1,000)							Purchased machinery installed  (\$1,000)	Capital expenditures (\$1,000)					Energy used-- kwh. equivalent  (million kwh.)	Aggregate horsepower (prime movers plus electric motors driven by purchased energy)  (1,000)	Ind. code
Wages and salaries		Supplies and purchases for resale	Minerals received for preparation	Purchased fuels	Purchased electric energy	Contract work		Total	Development and explo- ration of mineral property	Preparation plant and other con- struction	New machinery and equipment	Used plant and equipment			
Production, development, and explora- tion workers	Other employees														
2,773,193	<sup>2</sup> 1,069,794	<sup>4</sup> 2,784,972	2,673,723	<sup>4</sup> 295,396	<sup>4</sup> 266,479	<sup>4</sup> 1,918,765	<sup>2</sup> 1,127,023	<sup>2</sup> 3,267,558	<sup>2</sup> 1,431,662	<sup>2</sup> 506,320	<sup>2</sup> 1,136,103	<sup>2</sup> 193,473	<sup>2</sup> 436,810	(NA)	
2,679,515	1,062,954	2,702,630	2,670,235	294,434	264,878	1,918,322	1,123,639	3,263,615	1,431,662	505,850	1,133,269	192,834	436,435	52,772	
93,678	<sup>2</sup> 6,840	<sup>4</sup> 82,342	3,488	<sup>4</sup> 962	<sup>4</sup> 1,601	<sup>4</sup> 443	<sup>2</sup> 3,384	<sup>2</sup> 3,943	(NA)	<sup>2</sup> 470	<sup>2</sup> 2,834	<sup>2</sup> 639	<sup>2</sup> 375	(NA)	
383,671	131,536	331,116	311,733	39,448	51,395	110,801	96,480	230,944	65,068	83,892	75,222	6,762	31,911	6,115	1
49,889	8,946	27,156	63,919	2,947	5,771	22,230	9,059	15,111	939	4,177	8,065	1,930	2,692	704	1
650,955	111,308	380,461	285,563	21,330	56,724	66,133	197,860	218,340	7,312	38,444	152,236	20,348	16,071	6,301	1
1,093,048	651,663	<sup>1</sup> 1,575,624	<sup>1</sup> 953,875	135,516	89,754	1,641,513	648,073	2,551,692	1,342,262	328,037	743,441	137,952	329,344	28,309	1
595,630	166,341	<sup>4</sup> 470,615	<sup>2</sup> 58,633	<sup>4</sup> 96,155	<sup>4</sup> 62,835	<sup>4</sup> 78,088	<sup>2</sup> 175,551	<sup>2</sup> 251,471	<sup>2</sup> 16,081	<sup>2</sup> 51,770	<sup>2</sup> 157,139	<sup>2</sup> 26,481	<sup>2</sup> 56,792	(NA)	
501,952	159,501	388,273	55,145	95,193	61,234	77,645	172,167	247,528	16,081	51,300	154,305	25,842	56,417	11,343	1
93,678	6,840	<sup>4</sup> 82,342	<sup>2</sup> 3,488	<sup>4</sup> 962	<sup>4</sup> 1,601	<sup>4</sup> 443	<sup>2</sup> 3,384	<sup>2</sup> 3,943	(NA)	<sup>2</sup> 470	<sup>2</sup> 2,834	<sup>2</sup> 639	<sup>2</sup> 375	(NA)	
383,671	131,536	331,116	311,733	39,448	51,395	110,801	96,480	230,944	65,068	83,892	75,222	6,762	31,911	6,115	1
112,781	48,790	120,388	64,616	23,341	17,829	55,510	27,889	96,644	23,251	51,734	19,063	2,596	17,725	2,646	101
142,395	44,912	108,493	129,793	7,961	17,788	30,537	45,590	87,078	23,145	24,718	39,021	194	8,242	1,886	102
37,935	11,402	22,848	26,113	933	5,734	3,588	4,272	11,896	6,919	1,083	3,579	315	1,082	435	103
15,333	6,559	<sup>5</sup> 15,886	( <sup>5</sup> )	259	2,233	2,531	1,896	6,108	4,063	250	1,766	29	380	207	104
22,602	4,843	<sup>5</sup> 33,075	( <sup>5</sup> )	674	3,501	1,057	2,376	5,788	2,856	833	1,813	286	702	228	104
20,019	4,778	<sup>5</sup> 11,325	( <sup>5</sup> )	1,219	2,017	1,798	2,025	7,186	4,513	656	1,524	493	901	240	10
11,422	2,439	5,366	-	469	935	925	484	2,859	1,863	207	626	163	324	83	104
1,763	371	1,000	(X)	576	423	340	372	989	383	265	280	61	439	100	104
6,834	1,968	<sup>4</sup> 4,959	( <sup>5</sup> )	174	659	533	1,169	3,338	2,267	184	618	269	137	57	104
2,285	1,157	660	1,474	287	185	1,228	462	269	30	43	196	-	234	29	105
15,231	5,134	<sup>5</sup> 22,359	( <sup>5</sup> )	522	2,112	3,682	1,453	5,831	2,363	1,258	2,082	128	550	157	10
820	318	398	4,424	66	92	105	181	386	71	38	234	43	31	20	106
14,411	4,816	<sup>5</sup> 17,537	( <sup>5</sup> )	456	2,020	3,577	1,272	5,445	2,292	1,220	1,848	85	519	137	106
11,485	2,438	5,209	(X)	1,204	73	393	3,784	3,039	(X)	102	2,682	255	7315	185	106
41,540	12,925	47,308	82,263	3,981	5,657	14,065	11,005	19,001	4,847	4,298	7,075	2,781	2,862	537	10
1,562	277	791	-	135	110	242	128	317	136	37	81	63	54	19	107
5,131	1,270	3,761	-	479	1,362	1,485	2,096	2,171	(X)	70	2,098	3	377	61	107
34,170	11,049	41,747	81,636	3,253	4,145	12,334	8,555	15,929	4,401	4,147	4,687	2,694	2,386	434	107
677	329	1,009	627	114	40	4	226	584	310	44	209	21	45	23	107
49,889	8,946	27,156	63,919	2,947	5,771	22,230	9,059	15,111	939	4,177	8,065	1,930	2,692	704	
44,867	8,155	23,474	63,919	2,117	5,441	21,336	6,810	12,651	939	4,159	6,270	1,283	2,442	581	11
5,022	791	3,682	(X)	830	330	894	2,249	2,460	(X)	18	1,795	647	7250	123	11
650,955	111,308	380,461	285,563	21,330	56,724	66,133	197,860	218,340	7,312	38,444	152,236	20,348	16,071	6,301	
642,338	110,153	<sup>5</sup> 659,378	( <sup>5</sup> )	19,804	56,354	64,742	190,805	210,835	7,302	38,055	145,668	19,810	15,598	6,070	12
2,245	515	<sup>5</sup> 1,788	( <sup>5</sup> )	200	304	287	4,336	4,633	10	247	4,316	60	140	76	12
6,372	640	4,858	(X)	1,326	66	1,104	2,719	2,872	(X)	142	2,252	478	7333	155	12
1,093,048	651,663	<sup>1</sup> 1,575,624	<sup>1</sup> 953,875	135,516	89,754	1,641,513	648,073	2,551,692	1,342,262	328,037	743,441	137,952	329,344	28,309	
494,910	521,521	1,044,877	(X)	56,833	77,826	1,486,535	421,250	2,209,930	1,329,563	235,420	546,228	98,719	146,168	14,235	1
426,811	465,821	911,021	(X)	50,760	74,871	1,285,688	371,288	1,906,498	1,148,649	191,469	472,173	94,207	132,740	12,502	
68,099	55,700	133,856	(X)	6,073	2,955	200,847	49,962	303,432	180,914	43,951	74,055	4,512	13,428	1,733	
80,745	15,808	90,453	<sup>1</sup> 953,875	7,494	7,673	54,025	39,068	113,856	(X)	70,788	40,208	2,860	158,705	3,887	1
517,393	114,334	440,294	(X)	71,189	4,255	100,953	187,755	227,906	12,699	21,829	157,005	36,373	724,471	10,187	

TABLE 2. Detailed Statistics by Industry

Ind. code	Industry group and industry	Number of operating companies	Establishments (number)				Value of shipments and receipts (\$1,000)	Value of net shipments and receipts (\$1,000)	Value added in mining (\$1,000)	Persons engaged (number)					Man-hours worked by production, development, and exploration workers (1,000)
			Total	With 20 or more employees	Including mining operations	Including preparation plants				Total	Production, development, and exploration workers	Other employees	Proprietors and firm members		
													Total	Performing manual labor	
	Oil and gas field services--Continued														
1381	Drilling oil and gas wells.....	2,671	2,836	746	380	(X)	979,316	974,546	653,337	56,951	50,333	5,083	1,535	1,119	106,266
1382	Oil and gas exploration services.....	359	373	68	5	(X)	119,824	111,704	89,988	8,886	7,232	1,451	203	169	16,246
1389	Oil and gas field services, n.e.c.....	2,901	3,003	434	135	(X)	718,754	650,059	498,029	50,280	39,028	9,246	2,006	1,634	84,076
14	Nonmetallic mineral mining.....	8,497	10,302	1,730	10,087	6,781	12,756,420	12,678,609	2,066,014	146,998	118,623	24,044	34,331	33,548	253,624
	Mineral industries.....	7,079	8,421	1,486	8,206	6,549	2,346,903	2,272,580	1,744,774	125,569	98,355	22,883	4,331	3,548	212,786
	Included in manufactures.....	1,507	1,881	244	1,881	232	1409,517	1406,029	321,240	21,429	20,268	21,161	(NA)	(NA)	40,838
1411	Dimension stone.....	503	551	107	551	244	106,178	102,154	70,908	11,169	9,640	1,347	3182	3166	19,462
	Mineral industry.....	289	319	25	319	12	19,735	19,199	14,842	2,338	1,970	186	182	166	3,820
	Included in manufactures.....	218	232	82	232	232	86,443	82,955	56,066	8,831	7,670	1,161	(NA)	(NA)	15,642
	Dimension limestone..	107	110	22	110	52	21,721	21,107	15,237	2,199	1,853	306	340	337	3,772
	Mineral subindustry..	59	61	5	61	3	3,513	3,268	2,947	366	286	40	40	37	568
	Included in manufactures.....	49	49	17	49	49	18,208	17,839	12,290	1,833	1,567	266	(NA)	(NA)	3,204
	Dimension granite.....	116	137	42	137	72	40,885	39,076	26,203	3,490	3,009	461	320	318	6,099
	Minerals subindustry..	49	66	10	66	1	9,428	9,195	6,513	844	773	51	20	18	1,645
	Included in manufactures.....	70	71	32	71	71	31,457	29,881	19,690	2,646	2,236	410	(NA)	(NA)	4,454
	Dimension stone, n.e.c.	280	304	43	304	120	43,572	41,971	29,468	5,480	4,778	580	3122	3111	9,591
	Mineral subindustry..	181	192	10	192	8	6,794	6,736	5,382	1,128	911	95	122	111	1,607
	Included in manufactures.....	101	112	33	112	112	36,778	35,235	24,086	4,352	3,867	485	(NA)	(NA)	7,984
1421	Crushed and broken stone	1,886	2,586	767	2,540	2,097	1949,791	1930,650	705,553	50,149	42,070	37,050	31,029	3693	92,602
	Mineral industry.....	1,780	2,256	668	2,210	2,097	794,860	775,719	581,655	44,265	36,186	7,050	1,029	693	80,834
	Included in manufactures.....	194	330	99	330	(X)	1154,931	1154,931	123,898	5,884	5,884	(NA)	(NA)	(NA)	11,768
	Crushed and broken limestone.....	1,328	1,882	583	1,857	1,529	1681,938	1667,052	520,606	36,821	31,299	34,764	3758	3499	69,301
	Mineral subindustry..	1,277	1,612	491	1,587	1,529	542,886	528,000	408,450	31,853	26,331	4,764	758	499	59,365
	Included in manufactures.....	139	270	92	270	(X)	1139,052	1139,052	112,156	4,968	4,968	(NA)	(NA)	(NA)	9,936
	Crushed and broken granite.....	99	154	65	154	140	190,213	190,026	62,020	4,125	3,471	3611	343	341	7,938
	Mineral industry....	95	150	65	150	140	89,749	89,562	61,702	4,103	3,449	611	43	41	7,894
	Included in manufactures.....	4	4	-	4	(X)	1464	1464	318	22	22	(NA)	(NA)	(NA)	44
	Crushed and broken stone, n.e.c.....	459	550	119	529	428	1177,640	1173,572	122,927	9,203	7,300	31,675	3228	3153	15,363
	Mineral industry....	408	494	112	473	428	162,225	158,157	111,503	8,309	6,406	1,675	228	153	13,575
	Included in manufactures.....	54	56	7	56	(X)	115,415	115,415	11,424	894	894	(NA)	(NA)	(NA)	1,788
1441	Sand and gravel.....	4,729	5,241	534	5,209	3,840	1757,722	1746,220	582,696	45,544	35,919	37,100	32,525	32,220	76,390
	Mineral industry.....	4,141	4,616	512	4,584	3,840	678,068	666,566	513,728	42,667	33,042	7,100	2,525	2,220	70,620
	Included in manufactures.....	618	625	22	625	(X)	179,654	179,654	68,968	2,877	2,877	(NA)	(NA)	(NA)	5,770
	Construction sand and gravel.....	4,589	5,044	484	5,019	3,658	1687,193	1676,739	528,256	41,714	32,901	36,370	32,443	32,168	69,784
	Mineral subindustry..	4,001	4,419	462	4,394	3,658	607,539	597,085	459,288	38,837	30,024	6,370	2,443	2,168	64,014
	Included in manufactures.....	618	625	22	625	(X)	179,654	179,654	68,968	2,877	2,877	(NA)	(NA)	(NA)	5,770
	Glass sand subindustry	32	39	23	38	39	29,099	28,753	22,649	1,576	1,223	347	6	3	2,738
	Molding sand subindustry.....	68	93	11	91	85	16,642	16,315	12,838	982	764	163	55	49	1,546
	Industrial sand, n.e.c. subindustry.....	59	65	16	61	58	24,788	24,413	18,953	1,272	1,031	220	21	12	2,322
145	Clay and related minerals	825	1,080	136	1,080	201	1221,417	1218,934	160,006	11,640	10,263	31,169	3208	3155	21,277
	Mineral industries....	349	423	111	423	201	161,644	159,161	113,585	8,524	7,147	1,169	208	155	15,061
	Included in manufactures.....	496	657	25	657	(X)	159,773	159,773	46,421	3,116	3,116	(NA)	(NA)	(NA)	6,216

See footnotes at end of table.

**Group and Industry: 1963—Continued**

Principal expenses (\$1,000)							Purchased machinery installed  (\$1,000)	Capital expenditures (\$1,000)					Energy used-- kwh. equivalent  (million kwh.)	Aggregate horsepower (prime movers plus electric motors driven by purchased energy)  (1,000)	Ind. code
Wages and salaries		Supplies and purchases for resale	Minerals received for preparation	Purchased fuels	Purchased electric energy	Contract work		Total	Development and exploration of mineral property	Preparation plant and other construction	New machinery and equipment	Used plant and equipment			
Production, development, and exploration workers	Other employees														
281,064	37,086	232,349	(X)	41,711	2,211	82,053	115,681	148,026	12,351	13,542	92,633	29,500	718,103	5,253	138
36,915	10,913	23,036	(X)	3,102	156	5,204	10,064	11,726	-	826	10,545	355	7547	877	138
199,414	66,335	184,909	(X)	26,376	1,888	13,696	62,010	68,154	348	7,461	53,827	6,518	75,821	4,057	138
595,630	166,341	447,015	258,633	496,155	462,835	478,088	2175,551	2251,471	316,081	251,770	2157,139	226,481	256,792	(NA)	
501,952	159,501	388,273	55,145	95,193	61,234	77,645	172,167	247,528	16,081	51,300	154,305	25,842	56,417	11,343	1
93,678	6,840	482,342	23,488	4962	41,601	4443	23,384	23,943	(NA)	2470	22,834	2639	2375	(NA)	
39,061	7,698	27,961	3,502	1,606	2,039	1,073	4,146	5,057	333	765	3,365	894	651	(NA)	141
6,986	858	3,519	14	644	438	630	762	1,114	33	295	531	255	276	79	
32,075	6,840	24,442	3,488	962	1,601	443	3,384	3,943	(NA)	470	2,834	639	375	(NA)	
8,679	1,589	5,276	383	354	457	299	897	1,182	34	88	810	280	112	(NA)	
1,108	158	390	14	77	68	161	138	282	4	15	142	121	23	18	
7,571	1,431	4,886	369	277	389	138	759	900	(NA)	73	668	159	89	(NA)	
12,738	3,199	11,553	1,576	656	742	418	1,066	1,329	323	299	790	217	337	(NA)	
3,271	330	2,297	-	328	221	181	273	385	23	123	186	53	185	28	
9,467	2,869	9,256	1,576	328	521	237	793	944	(NA)	176	604	164	152	(NA)	
17,644	2,910	11,132	1,543	596	840	356	2,183	2,546	36	378	1,765	397	202	(NA)	
2,607	370	832	-	239	149	288	351	447	6	157	203	81	68	33	
15,037	2,540	10,300	1,543	357	691	68	1,832	2,099	(NA)	221	1,562	316	134	(NA)	
209,257	351,272	4188,378	9,051	426,083	419,807	423,599	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	14
177,843	51,272	157,345	9,051	26,083	19,807	23,599	60,007	82,687	1,402	18,741	50,813	11,731	9,951	4,269	
31,414	(NA)	431,033	(X)	(4)	(4)	(4)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
154,035	333,797	4123,863	7,061	418,960	413,930	416,409	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
126,791	33,797	96,967	7,061	18,960	13,930	16,409	40,644	59,535	1,034	11,829	37,213	9,459	6,484	3,219	
27,244	(NA)	426,896	(X)	(4)	(4)	(4)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
16,100	3,816	422,880	87	41,867	41,883	42,175	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
16,010	3,816	22,734	87	1,867	1,883	2,175	6,486	7,185	146	1,782	4,425	832	812	362	
90	(NA)	4146	(X)	(4)	(4)	(4)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
39,122	13,659	441,635	1,903	45,256	43,994	45,015	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
35,042	13,659	37,644	1,903	5,256	3,994	5,015	12,877	15,967	222	5,130	9,175	1,440	2,655	688	
4,080	(NA)	43,991	(X)	(4)	(4)	(4)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
183,147	41,827	4120,305	3,821	429,269	417,046	422,356	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
170,333	41,827	109,619	3,821	29,269	17,046	22,356	57,953	75,724	1,191	14,237	49,850	10,446	10,176	4,851	14
12,814	(NA)	410,686	(X)	(4)	(4)	(4)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
167,360	36,378	2110,456	3,081	425,773	414,522	421,264	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
154,546	36,378	99,770	3,081	25,773	14,522	21,264	52,795	68,954	1,147	13,066	44,584	10,157	7,962	4,603	
12,814	(NA)	410,686	(X)	(4)	(4)	(4)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
6,650	2,490	4,223	132	1,464	1,330	322	2,977	3,998	6	642	3,144	206	979	101	
3,776	1,216	1,787	301	904	465	494	757	904	9	111	759	25	352	81	
5,361	1,743	3,839	307	1,128	729	276	1,424	1,868	29	418	1,363	58	883	66	
47,857	8,056	442,947	438	411,470	45,019	45,075	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
34,115	8,056	29,595	438	11,470	5,019	5,075	11,081	14,619	1,128	3,299	9,165	1,027	8,278	528	1
13,742	(NA)	413,352	(X)	(4)	(4)	(4)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	

TABLE 2. Detailed Statistics by Industry

Ind. code	Industry group and industry	Number of operating companies	Establishments (number)				Value of shipments and receipts (\$1,000)	Value of net shipments and receipts (\$1,000)	Value added in mining (\$1,000)	Persons engaged (number)					Man-hours worked by production, development, and exploration workers (1,000)
			Total	With 20 or more employees	Including mining operations	Including preparation plants				Total	Production, development, and exploration workers	Other employees	Proprietors and firm members		
													Total	Performing manual labor	
	Clay and related minerals--Continued														
1452	Bentonite.....	31	44	16	44	32	18,105	(D)	11,435	824	644	167	13	8	1,508
1453	Fireclay.....	228	293	29	293	38	140,540	140,333	30,596	2,296	2,057	118	121	89	4,041
	Mineral industry... Included in manufactures.....	134	155	14	155	38	17,105	16,898	12,640	1,100	861	118	121	89	1,640
		101	138	15	138	(X)	123,435	123,435	17,956	1,196	1,196	(NA)	(NA)	(NA)	2,401
1454	Fuller's earth.....	15	15	9	15	12	12,954	(D)	9,071	763	653	105	5	1	1,363
1455	Kaolin and ball clay.	39	48	28	48	37	66,077	65,073	49,841	3,367	2,916	430	21	12	6,123
1456	Feldspar.....	24	31	10	31	17	8,459	8,429	6,117	470	394	67	9	8	850
1459	Clay and related minerals, n.e.c.....	495	649	44	649	65	175,282	(NA)	52,946	3,920	3,599	1282	139	137	7,392
	Mineral industry... Included in manufactures.....	115	130	34	130	65	38,944	(D)	24,481	2,000	1,679	282	39	37	3,577
		410	519	10	519	(X)	136,338	136,338	28,465	1,920	1,920	(NA)	(NA)	(NA)	3,815
147	Chemical and fertilizer minerals.....	177	235	106	217	138	576,904	536,840	433,313	21,118	14,595	6,445	78	59	31,213
1472	Barite.....	45	54	13	54	27	16,668	16,536	11,107	1,467	911	523	33	23	1,887
1473	Fluorspar.....	28	30	7	24	16	15,792	12,340	8,869	808	682	122	4	4	1,346
1474	Potash, soda, and borate minerals.....	19	23	16	23	19	192,116	(D)	156,151	7,055	4,822	2,228	5	3	9,849
1475	Phosphate rock.....	43	66	39	56	43	161,658	130,295	94,889	5,640	3,996	1,628	16	13	9,047
1476	Rock salt.....	20	25	15	23	20	59,297	58,630	49,539	2,450	1,812	631	7	5	4,260
1477	Sulfur.....	11	17	10	17	3	113,103	113,103	100,349	2,607	1,600	1,003	4	4	3,264
1479	Chemical-fertilizer mining, n.e.c.....	19	20	6	20	10	18,270	(D)	12,409	1,091	772	310	9	7	1,560
1481	Nonmetallic minerals services.....	118	119	11	(X)	(X)	13,246	13,244	9,326	960	806	65	89	66	1,575
149	Miscellaneous minerals, n.e.c.....	420	490	69	490	261	1131,162	1130,567	104,212	6,418	5,330	1868	1220	1189	11,105
	Mineral industries... Included in manufactures.....	413	453	53	453	261	102,446	101,851	78,325	5,697	4,609	868	220	189	9,663
		9	37	16	37	(X)	128,716	128,716	25,887	721	721	(NA)	(NA)	(NA)	1,442
1492	Gypsum.....	40	74	22	74	25	138,876	138,876	33,640	1,198	1,104	175	19	17	2,249
	Mineral industry... Included in manufactures.....	33	37	6	37	25	10,160	10,160	7,753	477	383	75	19	17	807
		9	37	16	37	(X)	128,716	128,716	25,887	721	721	(NA)	(NA)	(NA)	1,442
1493	Mica.....	31	34	6	34	18	5,560	(D)	3,925	407	357	41	9	9	733
1494	Native asphalt and bitumens.....	11	13	4	13	10	8,509	(D)	6,333	427	357	65	5	2	728
1495	Pumice and pumicite.	83	85	1	85	51	5,358	5,338	4,198	293	222	25	46	37	428
1496	Talc, soapstone, and pyrophyllite.....	43	65	9	65	32	17,534	17,272	13,746	1,307	1,054	222	31	30	2,229
1497	Natural abrasives, except sand.....	23	23	5	23	14	5,002	5,001	4,125	312	216	78	18	12	466
1498	Peat.....	108	109	4	109	43	7,360	7,360	5,626	571	442	62	67	60	948
1499	Nonmetallic minerals, n.e.c.....	81	87	18	87	68	42,963	42,911	32,619	1,903	1,578	300	25	22	3,324

Note: For explanation of column captions see Introduction.

Standard Notes: — Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, includes the estimated value of minerals produced and used in the same establishment in making manufactured products.<sup>2</sup>Excludes data for crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments.



## Group and Industry: 1963—Continued

Principal expenses (\$1,000)							Purchased machinery installed  (\$1,000)	Capital expenditures (\$1,000)					Energy used-- kwh. equivalent  (million kwh.)	Aggregate horsepower (prime movers plus electric motors driven by purchased energy)  (1,000)	Ind. code
Wages and salaries		Supplies and purchases for resale	Minerals received for preparation	Purchased fuels	Purchased electric energy	Contract work		Total	Development and exploration of mineral property	Preparation plant and other construction	New machinery and equipment	Used plant and equipment			
Production, development, and exploration workers	Other employees														
3,141	986	34,349	(5)	681	514	1,348	1,134	1,356	112	358	727	159	614	42	1452
9,427	813	48,210	69	4637	4239	4944	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	86
3,795	813	2,731	69	637	239	944	2,004	2,159	195	574	1,131	259	176		1453
25,632	(2)	45,479	(X)	(4)	(4)	(4)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
2,423	644	2,525	-	1,035	321	370	805	1,173	-	293	776	104	748	35	1454
14,500	3,218	511,924	(5)	3,236	1,875	674	3,764	5,237	478	584	4,094	81	2,547	192	1455
1,749	214	1,889	30	331	460	602	732	1,702	210	907	468	117	155	40	1456
16,617	2,181	414,365	24	45,550	41,610	41,137	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
8,507	2,181	6,492	24	5,550	1,610	1,137	2,642	2,992	133	583	1,969	307	4,038	133	1459
28,110	(2)	47,873	(X)	(4)	(4)	(4)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
85,678	51,430	69,335	41,266	23,630	15,694	19,838	33,849	60,021	10,801	11,801	36,414	1,005	25,695	1,235	147
3,605	3,194	33,758	(3)	374	831	957	742	1,101	20	440	526	115	271	60	1472
3,037	944	2,258	3,339	456	595	320	268	313	15	163	89	46	331	24	1473
32,901	18,958	528,687	(5)	9,650	4,624	7,998	11,779	26,773	7,806	4,893	13,766	308	8,279	330	1474
20,642	11,313	17,568	33,623	4,986	8,274	9,648	14,904	22,234	1,902	5,494	14,512	326	4,619	525	1475
11,142	4,813	510,108	(5)	509	957	427	5,158	7,401	983	556	5,688	174	502	106	1476
10,578	10,019	4,994	-	7,546	50	451	799	1,086	3	77	986	20	11,583	151	1477
3,773	2,189	5,742	524	109	363	37	199	1,113	72	178	847	16	110	39	1479
4,209	372	2,667	-	602	70	951	1,064	1,434	6	274	922	232	219	69	1481
26,421	35,686	419,022	555	43,495	43,160	45,196	37,451	311,929	31,520	32,653	36,610	31,146	31,822	3312	
22,788	5,686	16,193	555	3,495	3,160	5,196	7,451	11,929	1,520	2,653	6,610	1,146	1,822	312	149
3,633	(NA)	42,829	(X)	(4)	(4)	(4)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
5,546	3493	44,680	-	4297	4224	4450	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
1,913	493	1,851	-	297	224	450	864	1,279	90	206	862	121	122	32	1492
3,633	(NA)	42,829	(X)	(4)	(4)	(4)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
1,299	283	51,375	(5)	212	228	176	504	860	96	95	448	221	113	25	1493
1,723	518	1,085	-	178	342	1,025	627	1,081	391	199	480	11	75	34	1494
981	75	812	-	197	63	263	507	682	80	171	356	75	63	26	1495
5,390	1,237	2,973	262	269	662	302	468	1,148	205/	220	630	93	151	48	1496
1,048	535	900	-	157	151	88	79	498	12	258	203	25	70	17	1497
1,473	305	1,002	-	423	91	350	738	870	9	48	603	210	101	26	1498
8,961	2,240	56,488	(5)	1,762	1,399	2,542	3,664	5,511	637	1,456	3,028	390	1,127	104	1499

<sup>3</sup>Excludes data for mining operations in manufacturing establishments.<sup>4</sup>For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, the cost of purchased fuels, purchased electric energy, and contract work is included with the cost of supplies and purchases for resale.<sup>5</sup>The cost of minerals received for preparation is included with the cost of supplies and purchases for resale.<sup>6</sup>Includes the value of purchases for resale.<sup>7</sup>Excludes energy furnished without charge by operators of mineral properties.

TABLE 3. Selected Statistics by

	Division and State	Establishments (number)				Employees (number)			Man-hours worked by production, development, and exploration workers (1,000)	Principal expenses (\$1,000)			
		Total	With 20 or more employees	Including mining operations	Including preparation plants	Total	Production, development, and exploration workers	Other employees <sup>1</sup>		Total	Wages and salaries		Supplies and purchases for resale
											Production, development, and exploration workers	Other employees <sup>1</sup>	
1	United States, total	40,532	5,743	33,395	9,533	637,001	501,734	135,267	1,013,821	11,782,322	2,773,193	1,069,794	<sup>2</sup> 2,784,972
	Mineral industries	38,651	5,499	31,514	9,301	615,572	481,466	134,106	972,983	11,592,968	2,679,515	1,062,954	2,702,630
	Included in manufactures.....	1,881	244	1,881	232	21,429	20,268	1,161	40,838	189,354	93,678	<sup>1</sup> 6,840	<sup>2</sup> 82,342
	MINERAL INDUSTRIES												
2	New England.....	350	58	341	261	3,950	3,159	791	6,776	38,591	16,659	6,255	9,207
3	Maine.....	45	2	43	26	209	191	18	417	1,290	706	83	294
4	New Hampshire.....	32	3	32	28	217	167	50	375	2,248	863	317	608
5	Vermont.....	44	10	43	26	846	740	106	1,583	6,973	3,435	702	<sup>3</sup> 1,840
6	Massachusetts.....	128	24	126	109	1,655	1,216	439	2,562	16,004	6,508	3,546	<sup>3</sup> 3,855
7	Rhode Island.....	21	4	20	15	204	176	28	362	1,915	902	233	<sup>3</sup> 341
8	Connecticut.....	80	15	77	57	819	669	150	1,479	10,161	4,245	1,374	<sup>2</sup> 2,992
9	Middle Atlantic.....	4,080	523	3,707	1,096	62,495	50,867	11,628	99,760	788,856	273,682	90,531	162,019
10	New York.....	518	69	485	262	9,878	6,643	3,235	13,947	114,992	41,317	29,905	24,800
11	New Jersey.....	157	47	153	130	3,700	2,877	823	6,361	43,574	16,560	6,830	14,310
12	Pennsylvania.....	3,405	407	3,069	704	48,917	41,347	7,570	79,452	630,290	215,805	53,796	122,909
13	East North Central.....	4,753	570	4,200	1,761	62,234	50,762	11,472	101,801	910,999	288,514	85,129	206,706
14	Ohio.....	1,541	180	1,379	506	17,625	14,194	3,431	28,717	213,877	76,487	27,700	56,293
15	Indiana.....	728	76	660	267	7,314	5,900	1,414	11,818	81,068	32,632	9,195	<sup>3</sup> 23,051
16	Illinois.....	1,447	209	1,210	412	22,043	18,025	4,018	36,341	351,638	106,714	28,704	70,544
17	Michigan.....	691	78	613	312	12,155	10,137	2,018	19,905	229,186	59,488	15,727	45,712
18	Wisconsin.....	346	27	338	264	3,097	2,506	591	5,020	35,230	13,193	3,803	<sup>3</sup> 12,179
19	West North Central.....	3,551	393	2,910	1,306	44,119	34,852	9,267	70,324	760,023	180,932	68,839	184,663
20	Minnesota.....	334	67	323	247	13,248	9,947	3,301	18,923	240,241	59,522	31,479	74,941
21	Iowa.....	295	32	286	247	2,661	2,256	405	5,299	27,270	10,528	2,924	8,445
22	Missouri.....	425	66	375	285	7,728	5,818	1,910	11,259	75,916	27,128	11,098	21,198
23	North Dakota.....	187	23	150	68	1,693	1,363	330	2,847	36,809	7,649	2,106	<sup>3</sup> 14,661
24	South Dakota.....	131	14	124	68	2,553	2,227	326	4,910	27,936	11,699	1,976	<sup>3</sup> 10,496
25	Nebraska.....	370	21	318	179	2,125	1,714	411	3,775	35,762	8,642	2,531	<sup>3</sup> 11,923
26	Kansas.....	1,809	170	1,334	212	14,111	11,527	2,584	23,311	316,089	55,764	16,725	55,869
27	South Atlantic.....	4,447	802	4,111	1,130	82,179	72,264	9,915	140,768	1,044,564	366,226	68,053	244,994
28	Delaware and Maryland..	179	32	175	97	2,432	2,031	401	4,298	26,900	9,573	3,191	7,341
29	Virginia.....	944	201	907	227	15,631	13,972	1,659	25,514	150,285	57,894	9,053	33,588
30	West Virginia.....	2,702	374	2,438	354	47,636	42,444	5,192	79,814	623,768	238,509	38,535	146,919
31	North Carolina.....	169	46	164	125	2,615	2,268	347	5,012	24,200	8,728	2,190	<sup>3</sup> 8,883
32	South Carolina.....	68	25	66	58	1,660	1,471	189	3,327	15,314	5,615	1,159	<sup>3</sup> 6,555
33	Georgia.....	166	63	161	99	5,650	4,926	724	10,656	59,734	22,198	4,880	22,182
34	Florida.....	219	61	200	170	6,555	6,782	1,403	12,147	144,363	23,709	9,045	20,585
35	East South Central.....	3,309	563	2,878	842	48,829	42,869	5,960	80,663	643,084	200,999	38,684	154,023
36	Kentucky.....	2,066	319	1,787	421	27,771	24,899	2,872	45,351	343,424	115,110	16,465	70,186
37	Tennessee.....	503	87	479	191	6,867	6,022	845	12,281	73,698	27,270	5,174	22,844
38	Alabama.....	371	87	346	171	8,920	7,969	951	14,960	102,024	38,717	7,123	31,221
39	Mississippi.....	369	70	266	59	5,271	3,979	1,292	8,071	123,938	19,902	9,922	29,772
40	West South Central.....	12,127	1,745	8,502	975	196,365	135,900	60,465	287,706	4,998,703	768,333	502,778	1,184,537
41	Arkansas.....	422	60	344	88	4,727	3,965	762	8,124	78,318	18,714	4,874	21,245
42	Louisiana.....	1,454	353	881	150	45,715	34,897	10,818	76,717	1,653,187	215,396	97,695	<sup>3</sup> 885,467
43	Oklahoma.....	2,519	300	1,817	173	32,898	21,313	11,585	41,636	580,306	105,849	94,048	<sup>3</sup> 230,114
44	Texas.....	7,732	1,032	5,460	564	113,025	75,725	37,300	161,229	2,686,892	428,374	306,161	608,843
45	Mountain.....	3,664	515	2,868	886	77,003	61,916	15,087	127,380	1,578,390	387,078	120,733	366,559
46	Montana.....	416	40	338	81	7,563	6,105	1,458	12,552	149,921	35,353	11,712	30,122
47	Idaho.....	145	14	139	75	3,256	2,780	476	5,488	34,694	15,465	3,654	<sup>3</sup> 10,091
48	Wyoming.....	532	101	321	92	8,732	6,629	2,103	14,131	218,181	43,766	17,127	<sup>3</sup> 93,014
49	Colorado.....	858	83	725	211	11,203	8,396	2,807	16,210	178,434	48,265	24,462	42,542
50	New Mexico.....	865	149	600	128	17,638	13,776	3,862	27,978	453,162	85,356	29,209	101,572
51	Arizona.....	260	39	236	111	15,180	12,789	2,391	28,672	235,498	88,818	18,579	68,035
52	Utah.....	384	71	322	114	10,695	9,104	1,591	17,320	257,209	55,638	13,120	44,160
53	Nevada.....	204	18	187	74	2,736	2,337	399	5,029	51,291	14,417	2,870	<sup>3</sup> 27,177
54	Pacific.....	2,370	330	1,997	1,044	38,398	28,877	9,521	57,805	829,758	197,092	81,952	189,922
55	Washington.....	248	22	235	142	1,876	1,543	333	3,005	23,789	9,604	2,302	6,979
56	Oregon.....	206	22	201	146	1,938	1,571	367	3,028	21,192	8,819	2,415	5,715
57	California.....	1,734	264	1,394	658	32,941	24,338	8,603	48,781	728,046	167,470	74,715	166,397
58	Alaska.....	138	18	125	72	1,328	1,137	191	2,431	53,257	9,748	2,313	9,446
59	Hawaii.....	44	4	42	26	315	288	27	560	3,474	1,451	207	1,385

See footnotes at end of table.

## Geographic Area: 1963

Principal expenses--Con. (\$1,000)				Value of shipments and receipts <sup>4</sup>	Value added in mining	Purchased machinery installed <sup>1</sup>	Capital expenditures (\$1,000)			Energy used--kwh equivalent <sup>1</sup>		Horsepower rating of power equipment <sup>2</sup>		
Minerals received for preparation	Purchased fuels	Purchased electric energy	Contract work				Total <sup>1</sup>	Development and exploration of mineral property <sup>5</sup>	Plant and other construction, machinery, and equipment <sup>1</sup>	Total	Per production worker	Total	Per production worker	
				(\$1,000)	(\$1,000)	(\$1,000)				(million)	(1,000)	(1,000)		
2,673,723	<sup>2</sup> 295,396	<sup>2</sup> 266,479	<sup>2</sup> 1,918,765	22,030,055	16,231,255	1,127,023	3,267,558	1,431,662	1,835,896	<sup>1</sup> 436,810	<sup>1</sup> 893	52,772	(NA)	1
2,670,235	294,434	264,878	1,918,322	21,620,538	15,910,015	1,123,639	3,263,615	1,431,662	1,831,953	436,435	906	52,772	110	
3,488	<sup>2</sup> 962	<sup>2</sup> 1,601	<sup>2</sup> 443	409,517	321,240	3,384	3,943	(NA)	3,943	<sup>1</sup> 375	<sup>1</sup> 49	(NA)	(NA)	
724	2,420	1,730	1,596	56,167	42,353	5,260	7,123	450	6,673	790	250	392	124	2
1	127	59	20	1,965	1,517	260	313	7	306	31	162	16	84	3
(3)	141	110	209	3,102	2,184	320	470	2	468	39	234	25	150	4
(3)	387	446	163	11,072	8,780	496	1,040	390	650	165	223	47	64	5
(3)	1,012	584	499	22,442	16,902	2,737	3,147	29	3,118	353	290	146	120	6
(3)	112	49	278	2,661	2,018	123	260	6	254	27	153	26	148	7
(3)	641	482	427	14,925	10,952	1,324	1,893	16	1,877	175	262	132	197	8
147,322	22,129	29,663	63,510	1,129,402	740,308	72,945	108,494	13,692	94,802	13,042	256	3,995	79	9
3,320	5,659	4,898	5,093	166,561	129,730	8,371	15,310	3,896	11,414	3,176	478	734	110	10
641	2,247	2,263	723	72,978	55,232	5,142	7,580	369	7,211	910	316	256	89	11
143,361	14,223	22,502	57,694	889,863	555,346	59,432	85,604	9,427	76,177	8,956	217	3,005	73	12
153,115	32,031	37,439	108,065	1,487,774	1,042,467	111,602	203,651	30,718	172,933	18,707	369	5,379	106	13
22,662	7,836	5,956	16,943	318,810	223,883	31,066	45,829	7,465	38,364	3,753	264	1,576	111	14
(3)	3,819	4,446	7,925	143,340	107,524	15,940	19,365	1,453	17,912	1,877	318	614	104	15
98,679	8,402	17,263	21,332	654,518	450,534	44,715	56,951	10,932	46,019	5,735	318	1,567	87	16
30,701	9,382	8,524	59,652	316,375	223,052	15,489	76,137	10,661	65,476	6,681	659	1,257	124	17
(3)	2,592	1,250	2,213	54,731	37,474	4,392	5,369	207	5,162	661	264	365	146	18
160,375	36,355	20,994	107,865	1,476,680	1,069,300	73,747	176,619	59,146	117,473	28,116	807	4,892	140	19
46,781	15,321	6,971	5,226	502,129	367,698	10,385	25,194	8,790	16,404	10,906	1,096	1,757	177	20
564	2,312	780	1,717	44,943	33,200	3,397	5,472	240	5,232	636	282	320	142	21
583	3,031	3,284	9,594	95,561	66,288	14,120	22,537	8,648	13,889	1,286	221	602	103	22
(3)	1,034	622	10,737	93,144	73,711	10,214	17,835	4,758	13,077	1,856	1,362	248	182	23
(3)	870	908	1,987	37,949	25,648	1,002	2,962	1,246	1,716	495	222	146	66	24
(3)	1,953	1,059	9,654	87,813	69,319	4,555	10,650	4,006	6,644	1,614	942	256	149	25
99,577	11,834	7,370	68,950	615,141	433,436	30,074	91,969	31,458	60,511	11,323	982	1,563	136	26
247,373	23,706	38,951	55,261	1,574,915	1,011,629	89,191	136,190	22,595	113,595	19,637	272	4,528	63	27
2,322	1,280	929	2,264	47,441	35,284	2,959	4,938	650	4,288	465	229	230	113	28
32,785	3,461	5,197	8,307	224,132	144,818	10,967	14,991	478	14,513	3,647	261	748	54	29
138,635	5,809	18,282	37,079	910,553	596,058	47,735	79,964	19,528	60,436	6,818	161	2,063	49	30
(3)	1,542	1,182	1,675	44,406	31,598	4,058	4,532	917	3,615	880	388	269	119	31
(3)	985	714	286	26,602	19,047	1,585	2,570	6	2,564	483	328	169	115	32
1,163	4,850	3,029	1,432	106,741	75,814	7,747	9,476	571	8,905	3,212	652	356	72	33
71,409	5,779	9,618	4,218	215,040	109,010	14,140	19,719	445	19,274	4,132	802	693	135	34
134,563	16,414	18,534	79,867	1,103,667	746,996	73,743	120,473	33,294	87,179	13,911	325	3,015	70	35
105,122	5,385	10,381	20,775	541,840	337,367	45,293	52,669	7,807	44,862	4,614	185	1,512	61	36
4,634	3,898	2,787	7,091	126,690	90,138	8,458	13,160	1,400	11,760	2,606	433	455	76	37
6,319	3,008	4,166	11,470	168,714	118,977	9,126	15,775	3,791	11,784	1,457	183	530	67	38
18,488	4,123	1,200	40,531	266,423	200,512	10,866	39,069	20,296	18,773	5,234	1,315	518	130	39
1,296,367	107,452	50,839	1,088,397	10,197,344	7,801,797	474,426	1,806,471	901,365	905,106	253,160	1,863	20,187	149	40
14,621	3,453	1,973	13,438	155,475	110,162	7,909	17,326	7,588	9,738	3,805	960	402	101	41
(3)	31,630	4,461	418,538	3,416,809	2,639,988	173,412	736,687	418,257	318,430	61,798	1,771	4,115	118	42
(3)	12,893	9,442	127,960	1,039,504	805,927	58,161	204,993	98,817	106,176	28,822	1,352	3,033	142	43
720,614	59,476	34,963	528,461	5,585,556	4,245,720	234,944	847,465	376,703	470,762	158,735	2,096	12,637	167	44
379,982	31,320	46,626	246,092	2,895,285	2,101,849	158,552	435,695	189,339	246,356	50,544	816	6,198	100	45
37,421	2,169	3,548	29,596	189,523	111,023	42,304	66,660	20,060	46,600	2,909	476	537	88	46
(3)	691	1,206	3,587	51,942	40,122	1,383	5,138	1,684	3,454	475	171	162	58	47
(3)	6,506	7,867	49,901	560,599	453,101	26,489	76,279	40,605	35,674	10,134	1,529	969	146	48
31,144	3,383	5,487	23,151	335,759	253,250	12,447	35,645	13,383	22,262	5,457	650	692	83	49
134,824	8,658	8,696	84,847	876,934	649,569	39,159	150,391	67,700	82,691	22,840	1,658	1,575	114	50
25,603	5,242	11,329	17,892	385,945	287,366	13,078	42,600	20,276	22,324	3,938	308	1,182	92	51
100,836	2,283	6,053	35,119	423,811	267,832	20,813	53,285	23,227	30,058	3,823	420	748	82	52
(3)	2,388	2,440	1,999	70,772	39,586	2,879	5,697	2,404	3,293	968	414	334	143	53

TABLE 3. Selected Statistics

	Division and State	Establishments (number)				Employees (number)			Man-hours worked by production, development, and exploration workers (1,000)	Principal expenses (\$1,000)			
		Total	With 20 or more employees	Including mining operations	Including preparation plants	Total	Production, development, and exploration workers	Other employees <sup>1</sup>		Total	Wages and salaries		Supplies and purchases for resale
											Production, development, and exploration workers	Other employees <sup>1</sup>	
	INCLUDED IN MANUFACTURES												
1	New England.....	100	20	100	31	2,451	2,228	223	4,681	21,558	10,486	1,545	<sup>2</sup> 8,409
2	Maine.....	19	6	19	5	301	284	17	556	2,056	1,249	81	<sup>2</sup> 638
3	New Hampshire.....	7	1	7	1	123	103	20	212	1,827	566	176	<sup>2</sup> 911
4	Vermont.....	17	4	17	13	1,218	1,117	101	2,441	9,298	4,763	549	<sup>2</sup> 3,443
5	Massachusetts.....	30	7	30	9	567	483	84	988	6,257	2,529	735	<sup>2</sup> 2,681
6	Rhode Island.....	2	-	2	1	5	4	1	8	37	18	4	<sup>2</sup> 15
7	Connecticut.....	25	2	25	2	237	237	-	474	2,083	1,361	-	<sup>2</sup> 721
8	Middle Atlantic.....	242	42	242	38	2,923	2,855	68	5,736	27,837	14,273	434	<sup>2</sup> 12,820
9	New York.....	72	10	72	12	776	762	14	1,511	7,753	3,850	51	<sup>2</sup> 3,802
10	New Jersey.....	25	2	25	-	318	318	-	640	2,278	1,545	-	<sup>2</sup> 733
11	Pennsylvania.....	145	30	145	26	1,829	1,775	54	3,585	17,806	8,878	383	<sup>2</sup> 8,285
12	East North Central.....	392	47	392	51	4,355	4,120	235	8,202	38,273	19,921	1,594	<sup>2</sup> 15,760
13	Ohio.....	163	18	163	6	1,625	1,562	63	3,093	14,580	7,692	436	<sup>2</sup> 6,278
14	Indiana.....	53	12	53	15	1,447	1,319	128	2,626	11,777	6,138	879	<sup>2</sup> 4,311
15	Illinois.....	74	6	74	1	632	632	-	1,252	5,554	2,976	-	<sup>2</sup> 3,977
16	Michigan.....	51	5	51	4	293	290	3	580	2,939	1,508	13	<sup>2</sup> 3,977
17	Wisconsin.....	51	6	51	25	358	317	41	651	3,423	1,607	266	<sup>2</sup> 3,334
18	West North Central.....	216	29	216	20	2,286	2,096	190	4,388	20,275	9,446	1,312	<sup>2</sup> 7,871
19	Minnesota.....	31	6	31	5	431	348	83	781	3,632	1,715	608	<sup>2</sup> 3,144
20	Iowa.....	48	7	48	1	304	304	-	616	3,302	1,536	-	<sup>2</sup> 1,757
21	Missouri.....	71	9	71	6	1,017	945	72	1,970	9,272	4,102	481	<sup>2</sup> 3,725
22	North Dakota.....	4	-	4	-	18	18	-	37	138	74	-	<sup>2</sup> 64
23	South Dakota.....	10	3	10	2	172	145	27	309	1,394	660	197	<sup>2</sup> 3,496
24	Nebraska.....	9	1	9	1	72	72	-	144	616	397	-	<sup>2</sup> 219
25	Kansas.....	43	3	43	5	272	264	8	531	1,921	962	26	<sup>2</sup> 928
26	South Atlantic.....	257	35	257	36	3,232	3,019	213	5,917	25,123	11,809	1,135	<sup>2</sup> 10,850
27	Delaware, Maryland, and District of Columbia..	28	4	28	1	406	406	-	810	3,331	1,495	-	<sup>2</sup> 1,835
28	Virginia.....	41	9	41	5	594	567	27	1,142	4,142	2,353	103	<sup>2</sup> 1,663
29	West Virginia.....	13	2	13	-	133	133	-	267	1,529	749	-	<sup>2</sup> 780
30	North Carolina.....	57	2	57	5	492	458	34	803	3,018	1,490	194	<sup>2</sup> 1,253
31	South Carolina.....	26	1	26	1	103	100	3	204	874	482	14	<sup>2</sup> 367
32	Georgia.....	52	14	52	24	1,328	1,179	149	2,339	10,210	4,426	824	<sup>2</sup> 3,747
33	Florida.....	40	3	40	-	176	176	-	352	2,019	814	-	<sup>2</sup> 1,205
34	East South Central.....	115	21	115	11	1,505	1,404	101	2,749	11,085	5,521	322	<sup>2</sup> 4,645
35	Kentucky.....	25	1	25	2	106	106	-	208	970	472	-	<sup>2</sup> 498
36	Tennessee.....	25	7	25	6	675	604	71	1,152	4,234	2,042	222	<sup>2</sup> 1,427
37	Alabama.....	45	11	45	3	617	587	30	1,190	4,955	2,589	100	<sup>2</sup> 2,212
38	Mississippi.....	20	2	20	-	107	107	-	199	926	418	-	<sup>2</sup> 508
39	West South Central.....	192	19	192	13	1,396	1,315	81	2,720	12,608	5,784	219	<sup>2</sup> 6,446
40	Arkansas.....	30	2	30	3	194	192	2	372	1,828	844	7	<sup>2</sup> 971
41	Louisiana.....	19	-	19	-	35	35	-	73	451	172	-	<sup>2</sup> 279
42	Oklahoma.....	28	1	28	4	156	154	2	302	1,326	692	7	<sup>2</sup> 614
43	Texas.....	115	16	115	6	1,011	934	77	1,973	9,003	4,076	205	<sup>2</sup> 4,582
44	Mountain.....	148	7	148	16	1,095	1,076	19	2,152	10,344	5,503	83	<sup>2</sup> 4,718
45	Montana.....	11	-	11	-	29	29	-	56	280	157	-	<sup>2</sup> 123
46	Idaho.....	10	-	10	-	93	93	-	185	625	376	-	<sup>2</sup> 249
47	Wyoming.....	9	-	9	-	28	28	-	54	337	159	-	<sup>2</sup> 178
48	Colorado.....	39	1	39	5	171	169	2	339	1,570	902	9	<sup>2</sup> 642
49	New Mexico.....	16	2	16	2	141	136	5	269	1,259	700	25	<sup>2</sup> 533
50	Arizona.....	30	2	30	6	345	337	8	681	2,877	1,581	28	<sup>2</sup> 1,247
51	Utah.....	21	1	21	2	137	134	3	269	1,286	762	18	<sup>2</sup> 505
52	Nevada.....	12	1	12	1	151	150	1	299	2,110	866	3	<sup>2</sup> 1,241
53	Pacific.....	219	24	219	16	2,186	2,155	31	4,293	22,251	10,935	196	<sup>2</sup> 10,823
54	Washington.....	46	2	46	6	262	252	10	487	2,153	1,317	29	<sup>2</sup> 796
55	Oregon.....	25	-	25	-	134	134	-	270	1,162	608	-	<sup>2</sup> 554
56	California.....	140	22	140	10	1,738	1,717	21	3,434	18,454	8,773	167	<sup>2</sup> 9,228
57	Alaska.....	3	-	3	-	28	28	-	-	-	-	-	-

# by Geographic Area: 1963—Continued

Principal expenses—Con. (\$1,000)				Value of shipments and receipts <sup>4</sup>	Value added in mining	Purchased machinery installed <sup>1</sup>	Capital expenditures (\$1,000)			Energy used—kwh equivalent <sup>1</sup>		Horsepower rating of power equipment <sup>5</sup>		
Minerals received for preparation	Purchased fuels	Purchased electric energy	Contract work				Total <sup>2</sup>	Development and exploration of mineral property <sup>3</sup>	Plant and other construction, machinery, and equipment <sup>1</sup>	Total (million)	Per production worker (1,000)	Total (1,000)	Per production worker	
391	<sup>2</sup> 246	<sup>2</sup> 361	<sup>2</sup> 120	34,576	25,163	799	913	(NA)	913	94	55	(NA)	(NA)	1
391	<sup>2</sup> 51	<sup>2</sup> 56	<sup>2</sup> 112	{ 2,879	{ 2,182	{ 241	290	(NA)	290	94	55	{ (NA)	{ (NA)	2
	<sup>2</sup> 101	<sup>2</sup> 220		{ 2,568	{ 1,503	{ 241	290	(NA)	290			{ (NA)	{ (NA)	3
	<sup>2</sup> 94	<sup>2</sup> 85		{ 11,527	{ 7,575	{ 494	528	(NA)	528			{ (NA)	{ (NA)	4
	<sup>2</sup> 2	<sup>2</sup> 2	<sup>2</sup> 7	{ 11,374	{ 8,402	{ 62	83	(NA)	83			{ (NA)	{ (NA)	5
-	( <sup>2</sup> )	( <sup>2</sup> )	<sup>2</sup> 1	{ 104	{ 99	{ 2	12	(NA)	12	35	55	{ (NA)	{ (NA)	6
-	( <sup>2</sup> )	( <sup>2</sup> )		{ 6,124	{ 5,402	{ 2	12	(NA)	12			{ (NA)	{ (NA)	7
65	<sup>2</sup> 101	<sup>2</sup> 91	<sup>2</sup> 53	59,272	46,180	186	224	(NA)	224			(NA)	(NA)	8
-	<sup>2</sup> 27	<sup>2</sup> 13	<sup>2</sup> 10	15,888	12,041	73	78	(NA)	78	(NA)	78	(NA)	(NA)	9
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	4,885	4,152	-	-	(NA)	-			(NA)	(NA)	10
65	<sup>2</sup> 74	<sup>2</sup> 78	<sup>2</sup> 43	38,499	29,987	113	146	(NA)	146	26	50	(NA)	(NA)	11
140	<sup>2</sup> 344	<sup>2</sup> 405	<sup>2</sup> 109	80,213	63,611	646	802	(NA)	802	117	65	(NA)	(NA)	12
-	<sup>2</sup> 85	<sup>2</sup> 89	( <sup>2</sup> )	29,592	23,207	43	110	(NA)	110	117	65	{ (NA)	{ (NA)	13
( <sup>3</sup> )	<sup>2</sup> 153	<sup>2</sup> 240	<sup>2</sup> 56	20,569	15,837	482	510	(NA)	510			{ (NA)	{ (NA)	14
-	<sup>2</sup> 9	<sup>2</sup> 7	<sup>2</sup> 3	11,602	11,024	11	12	(NA)	12			{ (NA)	{ (NA)	15
( <sup>3</sup> )	<sup>2</sup> 97	<sup>2</sup> 69	<sup>2</sup> 50	11,089	9,672	110	170	(NA)	170			{ (NA)	{ (NA)	16
1,315	<sup>2</sup> 81	<sup>2</sup> 239	<sup>2</sup> 11	5,361	3,871	110	170	(NA)	170	38	44	(NA)	(NA)	17
( <sup>3</sup> )	<sup>2</sup> 47	<sup>2</sup> 115	<sup>2</sup> 3	46,714	37,235	349	387	(NA)	387			(NA)	(NA)	18
-	<sup>2</sup> 8	<sup>2</sup> 21	( <sup>2</sup> )	6,590	5,297	104	120	(NA)	120			(NA)	(NA)	19
853	<sup>2</sup> 16	<sup>2</sup> 92	( <sup>2</sup> )	10,498	8,752	( <sup>6</sup> )	( <sup>6</sup> )	(NA)	( <sup>6</sup> )	19	33	{ (NA)	{ (NA)	20
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	19,248	14,559	167	167	(NA)	167			{ (NA)	{ (NA)	21
( <sup>3</sup> )	<sup>2</sup> 10	<sup>2</sup> 31	( <sup>2</sup> )	387	323	-	-	(NA)	-			{ (NA)	{ (NA)	22
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	2,229	1,692	<sup>6</sup> 58	<sup>6</sup> 78	(NA)	<sup>6</sup> 78			{ (NA)	{ (NA)	23
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	1,519	1,300	-	-	(NA)	-	44	28	{ (NA)	{ (NA)	24
-	( <sup>2</sup> )	( <sup>2</sup> )	<sup>2</sup> 5	6,243	5,312	20	22	(NA)	22			{ (NA)	{ (NA)	25
857	<sup>2</sup> 97	<sup>2</sup> 267	<sup>2</sup> 108	45,606	33,521	630	724	(NA)	724			(NA)	(NA)	26
-	<sup>2</sup> 5	<sup>2</sup> 8	<sup>2</sup> 11	{ 6,360	{ 4,524	{ 184	193	(NA)	193	12	25	{ (NA)	{ (NA)	27
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	{ 8,621	{ 6,944	{ -	-	(NA)	-			{ (NA)	{ (NA)	28
12	<sup>2</sup> 22	<sup>2</sup> 48	<sup>2</sup> 10	{ 4,127	{ 3,347	{ 96	101	(NA)	101			{ (NA)	{ (NA)	29
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	{ 4,911	{ 3,582	{ -	-	(NA)	-			{ (NA)	{ (NA)	30
845	<sup>2</sup> 70	<sup>2</sup> 211	<sup>2</sup> 87	1,875	1,497	350	430	(NA)	430	32	30	{ (NA)	{ (NA)	31
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	12,998	8,118	-	-	(NA)	-			{ (NA)	{ (NA)	32
447	<sup>2</sup> 23	<sup>2</sup> 123	<sup>2</sup> 4	6,714	5,509	-	-	(NA)	-			{ (NA)	{ (NA)	33
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	21,180	16,020	638	720	(NA)	720	18	27	(NA)	(NA)	34
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	{ 2,846	{ 2,348	{ 638	3	(NA)	3	18	27	{ (NA)	{ (NA)	35
447	<sup>2</sup> 23	<sup>2</sup> 123	<sup>2</sup> 4	{ 6,511	{ 4,563	{ -	152	(NA)	152			{ (NA)	{ (NA)	36
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	{ 9,885	{ 7,679	{ -	565	(NA)	565			{ (NA)	{ (NA)	37
64	<sup>2</sup> 19	<sup>2</sup> 50	<sup>2</sup> 26	{ 1,938	{ 1,430	{ -	-	(NA)	-			{ (NA)	{ (NA)	38
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	34,349	27,751	46	53	(NA)	53	10	48	(NA)	(NA)	39
-	( <sup>2</sup> )	<sup>2</sup> 6	( <sup>2</sup> )	4,691	3,714	2	2	(NA)	2	1	25	{ (NA)	{ (NA)	40
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	825	546	-	-	(NA)	-			{ (NA)	{ (NA)	41
9	<sup>2</sup> 1	<sup>2</sup> 3	( <sup>2</sup> )	4,884	4,260	3	6	(NA)	6			{ (NA)	{ (NA)	42
55	<sup>2</sup> 18	<sup>2</sup> 41	<sup>2</sup> 26	23,949	19,231	41	45	(NA)	45	9	54	(NA)	(NA)	43
8	<sup>2</sup> 9	<sup>2</sup> 15	<sup>2</sup> 8	32,662	27,906	47	49	(NA)	49	4	49	(NA)	(NA)	44
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	1,184	1,061	-	-	(NA)	-	4	49	{ (NA)	{ (NA)	45
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	2,436	2,187	-	-	(NA)	-			{ (NA)	{ (NA)	46
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	856	678	-	-	(NA)	-			{ (NA)	{ (NA)	47
8	<sup>2</sup> 9	<sup>2</sup> 15	<sup>2</sup> 7	{ 4,719	{ 4,060	{ 7	7	(NA)	7			{ (NA)	{ (NA)	48
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	{ 4,187	{ 3,654	{ 27	29	(NA)	29	15	81	{ (NA)	{ (NA)	49
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	{ 9,634	{ 8,367	{ 13	13	(NA)	13			{ (NA)	{ (NA)	50
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	{ 3,336	{ 2,830	{ -	-	(NA)	-			{ (NA)	{ (NA)	51
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	{ 6,310	{ 5,069	{ -	-	(NA)	-			{ (NA)	{ (NA)	52
201	<sup>2</sup> 42	<sup>2</sup> 50	<sup>2</sup> 4	54,945	43,853	43	71	(NA)	71	15	81	(NA)	(NA)	53
-	<sup>2</sup> 6	<sup>2</sup> 5	( <sup>2</sup> )	5,573	4,768	4	6	(NA)	6	15	81	{ (NA)	{ (NA)	54
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	4,208	3,654	-	-	(NA)	-			{ (NA)	{ (NA)	55
201	<sup>2</sup> 36	<sup>2</sup> 45	<sup>2</sup> 4	43,848	34,360	39	65	(NA)	65			{ (NA)	{ (NA)	56
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	379	303	-	-	(NA)	-			{ (NA)	{ (NA)	57
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	937	768	-	-	(NA)	-	15	81	{ (NA)	{ (NA)	58
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )					(NA)				{ (NA)	{ (NA)	59
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )					(NA)				{ (NA)	{ (NA)	60
-	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )					(NA)				{ (NA)	{ (NA)	61

<sup>1</sup>The cost of minerals received for preparation is included with the cost of supplies and purchases for resale.

<sup>2</sup>For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, includes the estimated value of minerals produced and used in the same establishment in making manufactured products.

<sup>3</sup>Excludes data for mining operations in manufacturing establishments.

<sup>4</sup>Figures for Iowa are included with those for South Dakota.

TABLE 4. Selected Statistics by Major Industry Group

(For explanation of column captions and for statement on the minimum size of establishments)

Major industry group, industry, and year		Operating companies  (number)	Establishments (number)			Value of net shipments and receipts <sup>2</sup>  (\$1,000)	Value added in mining  (\$1,000)	Persons engaged (number)				Man-hours worked by production, development, and exploration workers  (1,000)
			Total	Including mining operations <sup>1</sup>	Including preparation plants			Production, development, and exploration workers	Other employees <sup>3</sup>	Proprietors and firm members <sup>4</sup>		
										Total	Performing manual labor	
All mineral operations: Including oil and gas extraction:												
1	1963.....	32,884	40,532	33,395	9,533	19,210,458	16,231,255	501,734	135,267	28,996	19,049	1,013,821
2	1958.....	32,005	37,966	31,302	8,714	16,728,989	13,685,405	585,159	169,723	<sup>6</sup> 37,005	<sup>6</sup> 16,152	1,119,489
3	1954.....	33,120	38,858	32,447	8,969	<sup>9</sup> 14,465,256	<sup>9</sup> 11,752,300	667,821	139,566	40,422	21,175	1,291,472
4	1939 <sup>10</sup> .....	20,658	<sup>11</sup> 25,023	22,162	5,450	3,432,804	2,679,828	774,130	82,259	16,040	7,068	1,287,852
Excluding oil and gas extraction:												
5	1963.....	16,545	19,290	14,401	8,881	6,787,062	5,211,459	309,758	55,767	11,327	9,495	616,473
6	1958.....	16,765	19,444	18,549	8,121	6,071,942	4,652,912	371,158	70,808	<sup>6</sup> 16,620	<sup>6</sup> 9,234	679,233
7	1954.....	18,030	21,267	20,939	8,387	<sup>9</sup> 5,235,311	<sup>9</sup> 4,078,606	432,303	59,276	20,598	13,959	799,679
8	1939 <sup>10</sup> .....	11,310	<sup>11</sup> 13,794	13,557	4,716	1,772,973	1,437,355	625,134	45,105	8,310	5,213	1,022,824
9	1929 <sup>10</sup> .....	(NA)	10,996	12,506	(NA)	2,392,831	1,955,804	812,220	53,331	4,897	(NA)	(NA)
Metal mining:												
10	1963.....	1,308	1,614	1,465	539	1,835,665	1,418,217	62,182	15,028	1,035	866	125,663
11	1958.....	2,024	2,351	2,174	687	1,561,506	1,180,216	70,750	20,832	<sup>6</sup> 1,968	<sup>6</sup> 1,298	136,242
12	1954.....	3,127	3,668	3,527	1,141	<sup>9</sup> 1,372,117	<sup>9</sup> 1,084,142	82,715	18,495	3,759	2,931	170,497
13	1939 <sup>10</sup> .....	1,886	(NA)	2,095	693	517,377	416,956	89,791	10,344	1,169	824	190,835
14	1929 <sup>10</sup> .....	(NA)	1,799	2,007	(NA)	633,821	496,335	115,775	9,802	313	(NA)	(NA)
Iron ores:												
15	1963.....	115	208	197	118	709,352	549,305	18,102	4,981	36	33	34,524
16	1958.....	127	243	233	124	617,925	487,667	22,517	7,596	130	83	39,926
17	1954.....	94	225	298	123	539,160	435,668	28,216	5,954	73	46	53,288
18	1939 <sup>10</sup> .....	116	(NA)	196	44	150,871	133,390	20,377	2,274	32	14	38,513
19	1929 <sup>10</sup> .....	(NA)	186	124	(NA)	197,335	167,127	28,623	2,490	9	(NA)	(NA)
Copper ores:												
20	1963.....	118	160	152	49	544,239	417,089	21,372	5,114	109	84	45,319
21	1958 <sup>10</sup> .....	112	148	140	36	374,428	266,485	20,898	6,744	104	69	41,021
22	1954 <sup>10</sup> .....	179	212	201	48	409,911	334,876	21,544	6,269	184	145	46,676
23	1939 <sup>10</sup> .....	35	(NA)	51	27	141,634	108,494	23,844	2,908	-	-	51,239
24	1929 <sup>10</sup> .....	(NA)	143	180	45	283,517	221,690	44,502	3,465	76	(NA)	(NA)
Lead and zinc ores:												
25	1963.....	163	205	196	54	119,785	84,373	7,822	1,600	88	79	14,781
26	1958 <sup>10</sup> .....	226	288	275	69	103,843	73,679	8,728	2,499	212	141	16,734
27	1954.....	411	520	491	141	140,132	107,409	13,592	2,974	450	343	27,554
28	1939 <sup>10</sup> .....	208	(NA)	260	124	62,651	47,310	15,731	1,994	89	48	32,481
29	1929 <sup>10</sup> .....	(NA)	303	375	188	112,428	84,793	25,907	1,818	78	(NA)	(NA)
Lode gold and silver ores:												
30	1963.....	304	308	307	45	52,692	21,838	3,260	595	244	209	6,874
31	1958 <sup>10</sup> .....	302	305	303	58	40,655	33,023	3,088	487	251	185	6,348
32	1954.....	399	414	406	167	39,103	31,859	3,735	580	384	306	8,202
33	1939 <sup>10</sup> .....	1,004	(NA)	1,038	365	105,780	82,863	21,847	2,034	631	492	50,577
34	1929 <sup>10</sup> .....	(NA)	241	258	94	26,107	17,604	7,946	663	114	(NA)	(NA)
Placer gold:												
35	1963.....	155	158	158	158	7,532	5,810	325	36	165	164	731
36	1958.....	164	165	165	165	12,628	9,123	753	87	197	164	1,882
37	1954.....	271	281	281	249	14,781	10,306	1,152	168	378	328	3,010
38	1939 <sup>10</sup> .....	307	(NA)	340	339	28,027	21,935	3,228	477	260	167	8,088
39	1929 <sup>10</sup> .....	(NA)	32	37	(NA)	3,779	2,582	578	90	18	(NA)	(NA)
Bauxite:												
40	1963.....	10	17	11	7	20,478	17,464	414	138	6	6	751
41	1958.....	12	29	23	8	17,374	15,430	502	203	7	6	905
42	1954.....	12	25	20	9	16,029	12,827	661	191	2	-	1,288
43	1939 <sup>14</sup> .....	10	(NA)	12	11	2,527	1,965	727	100	-	-	1,176
44	1929.....	(NA)	9	11	(NA)	2,239	1,781	602	87	1	(NA)	(NA)
Manganese ores:												
45	1963.....	16	17	11	8	2,804	2,348	180	44	4	3	351
46	1958.....	182	186	176	68	34,330	20,014	1,792	307	209	128	3,475
47	1954.....	319	367	360	63	27,016	18,118	2,266	338	458	386	4,293
48	1939 <sup>14</sup> .....	26	(NA)	34	14	945	707	504	41	12	4	959
49	1929 <sup>14</sup> .....	(NA)	19	21	(NA)	1,184	967	354	35	4	(NA)	(NA)
Tungsten ores and ferroalloy ores, n.e.c.:												
50	1963.....	33	41	39	9	80,915	64,059	2,447	431	15	14	4,516

## and Industry: 1963 and Earlier Years

included for each year, see Introduction. For 1929, excludes data for service industries)

Principal expenses (\$1,000)						Purchased machinery, installed <sup>3</sup> (\$1,000)	Capital expenditures (\$1,000)				Energy used <sup>3</sup> (million kwh. equivalent)	Aggregate horsepower <sup>4</sup> (1,000)	
Wages and salaries		Supplies and purchases for resale <sup>5</sup>	Purchased fuels <sup>5</sup>	Purchased electric energy <sup>5</sup>	Contract work <sup>5</sup>		Development and exploration of mineral property <sup>4</sup>	Preparation plant and other construction <sup>3</sup>	New machinery and equipment <sup>3</sup>	Used plant and equipment <sup>3</sup>			
Production, development, and exploration workers	Other employees <sup>3</sup>												
2,773,193	1,069,794	2,784,972	295,396	266,479	1,918,765	1,127,023	1,431,662	506,320	1,136,103	193,473	436,810	52,772	1
2,702,484	1,133,124	<sup>7</sup> 2,465,818	<sup>7</sup> 275,727	<sup>7</sup> 202,547	1,862,759	1,019,892	1,144,342	<sup>8</sup> 466,585	<sup>8</sup> 1,097,376	<sup>8</sup> 98,305	406,110	(NA)	2
2,646,825	819,276	2,023,730	208,159	160,888	1,829,153	1,216,036	1,309,614	314,040	993,780	110,646	373,770	41,045	3
970,546	204,225	307,980	60,965	69,245	220,984	(NA)	(NA)	27,435	241,135	21,962	224,898	14,160	4
1,680,145	418,131	1,209,348	159,880	176,725	277,252	478,950	89,400	177,813	389,828	54,882	107,466	24,463	5
1,691,246	443,679	<sup>7</sup> 1,063,069	<sup>7</sup> 145,075	<sup>7</sup> 149,214	297,564	364,751	65,606	<sup>8</sup> 206,846	<sup>8</sup> 300,486	<sup>8</sup> 39,623	95,750	(NA)	6
1,670,040	333,209	854,713	111,265	125,871	270,119	350,969	79,656	155,148	224,230	40,842	88,657	20,941	7
750,111	106,278	220,789	34,718	62,144	17,966	(NA)	(NA)	16,217	52,666	9,451	77,131	9,059	8
1,099,895	139,023	298,198	49,146	71,769	17,914	86,733	89,646	(NA)	(NA)	(NA)	133,790	7,584	9
383,671	131,536	331,116	39,448	51,395	110,801	96,480	65,068	83,892	75,222	6,762	31,911	6,115	10
355,031	131,161	<sup>7</sup> 279,966	<sup>7</sup> 37,979	<sup>7</sup> 36,965	132,912	70,004	44,711	<sup>8</sup> 97,599	<sup>8</sup> 65,705	<sup>8</sup> 7,118	27,800	(NA)	11
358,002	110,733	231,678	27,734	32,662	117,173	87,454	64,941	84,589	66,150	6,748	21,677	5,236	12
127,111	26,806	68,719	10,400	18,686	2,616	(NA)	(NA)	5,409	14,775	3,342	14,628	2,264	13
178,319	27,484	93,951	17,098	18,975	7,462	25,391	59,682	(NA)	(NA)	(NA)	24,727	1,736	14
112,781	48,790	120,388	23,341	17,829	55,510	27,889	23,251	51,734	19,063	2,596	17,725	2,646	15
116,319	52,724	<sup>7</sup> 75,649	<sup>7</sup> 17,440	<sup>7</sup> 13,735	29,442	18,483	<sup>10</sup> 10,845	<sup>8</sup> 11,992	<sup>8</sup> 18,549	<sup>8</sup> 1,217	11,106	(NA)	16
119,688	37,221	75,866	9,549	13,767	47,515	36,994	23,515	32,790	27,955	718	5,928	1,795	17
27,431	5,895	10,791	2,280	4,174	236	(NA)	(NA)	784	3,550	210	3,246	600	18
41,049	6,385	18,717	5,332	4,607	1,552	4,016	10,223	(NA)	(NA)	(NA)	7,763	501	19
142,395	44,912	108,493	7,961	17,788	30,537	45,590	23,145	24,718	39,021	194	8,242	1,886	20
106,357	37,144	86,587	9,744	9,476	22,024	19,191	9,720	14,835	16,534	3,785	10,239	(NA)	21
98,491	37,574	72,822	8,576	6,278	43,873	23,821	23,750	35,265	21,955	1,240	9,255	1,546	22
34,486	8,078	23,562	4,168	4,899	511	(NA)	(NA)	1,822	2,577	1,507	6,693	753	23
73,200	10,136	43,995	9,210	6,027	2,595	13,084	22,151	(NA)	(NA)	(NA)	12,200	702	24
37,935	11,402	22,848	933	5,734	3,588	4,272	6,919	1,083	3,579	315	1,082	435	25
39,001	15,396	21,185	1,058	5,869	2,952	2,920	4,160	1,845	2,502	112	1,153	(NA)	26
53,676	17,687	24,673	1,409	6,838	6,080	5,942	6,509	2,054	2,509	448	1,641	750	27
20,253	5,084	10,580	848	3,550	363	(NA)	(NA)	390	778	339	1,556	353	28
39,191	5,053	18,344	1,536	6,102	1,653	3,752	8,172	(NA)	(NA)	(NA)	2,964	358	29
18,256	4,407	<sup>12</sup> 10,325	643	1,594	1,458	1,653	4,130	391	1,244	432	461	140	30
15,549	2,655	7,188	774	1,227	580	1,065	1,116	871	651	246	457	(NA)	31
15,603	2,910	7,213	<sup>13</sup> 677	991	<sup>13</sup> 694	1,361	1,630	728	590	301	723	171	32
33,321	4,973	16,261	1,595	3,921	1,140	(NA)	(NA)	1,890	3,588	615	1,830	335	33
12,983	1,738	5,934	558	1,317	694	1,509	5,641	(NA)	(NA)	(NA)	1,130	99	34
1,763	371	1,000	576	423	340	372	383	265	280	61	439	100	35
4,204	809	2,074	<sup>13</sup> 064	431	247	617	215	244	374	95	579	(NA)	36
5,642	1,107	2,956	664	661	<sup>13</sup> 872	665	254	282	438	369	718	149	37
5,632	1,162	3,780	700	1,471	141	(NA)	(NA)	135	3,348	442	510	110	38
970	260	590	1	604	2	359	76	(NA)	(NA)	(NA)	69	20	39
2,285	1,157	660	287	185	1,228	462	30	43	196	-	234	29	40
2,290	1,316	728	258	172	445	1,483	24	107	1,247	30	151	(NA)	41
2,529	1,052	789	239	134	1,603	356	24	11	271	4	170	49	42
578	241	269	187	60	46	(NA)	(NA)	20	173	7	270	13	43
513	277	216	122	38	82	96	13	(NA)	(NA)	(NA)	(NA)	6	44
820	318	398	66	92	105	181	71	38	234	43	31	20	45
7,244	1,792	5,216	1,101	677	2,807	1,085	469	253	1,113	355	582	(NA)	46
7,643	1,649	5,087	721	477	3,573	2,304	607	708	1,366	583	477	106	47
483	83	161	37	40	-	(NA)	(NA)	3	29	6	37	5	48
392	88	140	32	39	6	12	40	(NA)	(NA)	(NA)	73	2	49



(For explanation of column captions and for statement on the minimum size of establishments)

Major industry group, industry, and year	Operating companies  (number)	Establishments (number)			Value of net shipments and receipts <sup>2</sup>  (\$1,000)	Value added in mining  (\$1,000)	Persons engaged (number)				Man-hours worked by production, development, and exploration workers  (1,000)
		Total	Including mining operations <sup>1</sup>	Including preparation plants			Production, development, and exploration workers	Other employees <sup>3</sup>	Proprietors and firm members <sup>4</sup>		
									Total	Performing manual labor	
Metal mining--Continued											
Mercury ores:											
1963.....	49	49	49	38	3,658	2,569	279	37	28	27	610
1958 <sup>10</sup> .....	77	79	78	72	168,607	7,093	569	83	78	62	1,223
1954 <sup>10</sup> .....	81	87	87	75	164,519	3,355	372	81	125	110	841
1939 <sup>10</sup> .....	72	(NA)	69	60	1,830	1,425	621	81	51	41	1,421
1929 <sup>10</sup> .....	(NA)	40	40	(NA)	2,820	2,042	1,029	88	10	(NA)	(NA)
Titanium ores:											
1963.....	7	8	8	8	22,033	15,021	846	151	-	-	1,721
1958.....	9	11	10	11	16,531	12,746	706	256	-	-	1,234
1954.....	7	10	8	8	1612,750	11,134	568	275	1	1	1,261
1939.....	3	(NA)	3	3	458	370	183	13	-	-	322
Uranium-radium-vanadium ores:											
1963.....	266	335	318	37	17244,738	190,629	5,114	1,551	292	208	11,251
1958.....	563	602	582	30	226,999	174,802	6,389	1,550	507	291	13,873
1954.....	572	637	636	8	(NA)	(NA)	2,944	523	614	339	6,227
1939.....	8	(NA)	8	6	1,472	1,043	378	63	5	3	879
Metallic ores, n.e.c.:											
1963.....	25	25	19	8	172,407	1,598	130	35	11	11	216
1958.....	66	66	62	9	163,018	1,847	187	50	59	41	343
1954.....	44	47	45	9	161,325	794	98	20	40	34	207
Anthracite mining:											
1963.....	1,025	1,069	946	153	172,064	120,540	10,324	1,462	1,373	1,307	19,544
1958.....	1,157	1,248	1,065	188	234,000	164,489	20,047	2,766	1,863	1,298	30,867
1954.....	1,296	1,436	1,263	196	291,408	196,835	33,026	4,436	2,338	2,065	48,266
1939.....	359	(NA)	518	163	201,126	154,023	83,112	5,480	301	161	124,462
1929.....	(NA)	198	303	(NA)	384,854	320,756	142,801	8,370	38	(NA)	(NA)
Anthracite:											
1963.....	987	1,026	946	153	156,526	110,527	9,331	1,361	1,355	1,291	17,758
1958.....	1,075	1,163	1,065	188	199,214	142,198	17,266	2,446	1,795	1,253	26,409
1954.....	1,160	1,291	1,263	196	248,513	167,090	28,823	3,946	2,201	1,985	42,061
1939.....	289	(NA)	518	163	189,648	146,418	80,429	5,284	232	139	120,085
1929.....	(NA)	198	303	(NA)	384,854	320,756	142,801	8,370	38	(NA)	(NA)
Anthracite mining services:											
1963.....	41	43	(X)	(X)	15,538	10,013	993	101	18	16	1,786
1958.....	84	85	(X)	(X)	34,786	22,291	2,781	320	68	45	4,458
1954.....	144	145	(X)	(X)	42,895	29,745	4,203	490	137	80	6,205
1939.....	71	71	(X)	(X)	11,478	7,605	2,683	196	69	22	4,377
Bituminous coal and lignite mining:											
1963.....	5,841	6,305	5,999	1,408	2,100,721	1,606,688	118,629	15,233	4,588	3,774	217,642
1958.....	6,310	6,940	6,571	1,837	2,098,526	1,615,744	163,730	24,233	7,313	3,785	26,817
1954.....	6,113	6,865	6,857	630	1,812,781	1,424,161	199,970	19,236	7,762	5,487	326,457
1939 <sup>10</sup> .....	5,182	(NA)	5,847	365	731,427	610,674	370,944	19,834	4,676	3,409	545,702
1929 <sup>10</sup> .....	(NA)	4,995	5,639	(NA)	966,694	819,976	458,835	23,686	2,983	(NA)	(NA)
Bituminous coal:											
1963.....	5,663	6,115	5,941	1,382	2,063,165	1,578,078	116,975	15,071	4,412	3,620	214,421
1958.....	6,112	6,725	6,513	1,813	2,065,892	1,591,321	161,908	24,025	7,073	3,629	264,779
1954.....	5,922	6,653	6,797	630	1,784,798	1,402,551	198,134	19,052	7,541	5,326	323,098
1939 <sup>10</sup> .....	5,021	(NA)	5,716	365	727,358	607,318	369,265	19,690	4,497	3,271	542,310
Lignite:											
1963.....	52	59	58	26	13,981	11,830	441	71	45	45	884
1958.....	53	58	58	24	11,035	9,309	437	73	57	38	844
1954.....	56	60	60	-	10,387	9,093	505	69	57	43	901
1939.....	130	(NA)	131	-	3,457	2,879	1,480	115	144	118	3,027
Bituminous coal mining services:											
1963.....	131	131	(X)	(X)	23,575	16,780	1,213	91	131	109	2,337
1958.....	157	157	(X)	(X)	21,599	15,114	1,385	135	183	118	2,547
1954.....	152	152	(X)	(X)	1617,596	12,517	1,331	115	164	118	2,458
1939.....	32	32	(X)	(X)	612	477	199	29	35	20	365

## and Industry: 1963 and Earlier Years—Continued

included for each year, see Introduction. For 1929, excludes data for service industries)

Principal expenses (\$1,000)						Purchased machinery installed <sup>3</sup> (\$1,000)	Capital expenditures (\$1,000)					Energy used <sup>3</sup> (million kwh. equivalent)	Aggregate horsepower <sup>4</sup> (1,000)
Wages and salaries		Supplies and purchases for resale <sup>5</sup>	Purchased fuels <sup>5</sup>	Purchased electric energy <sup>5</sup>	Contract work <sup>5</sup>		Development and exploration of mineral property <sup>4</sup>	Preparation plant and other construction <sup>3</sup>	New machinery and equipment <sup>3</sup>	Used plant and equipment <sup>3</sup>			
Production, development, and exploration workers	Other employees <sup>3</sup>												
1,562	277	791	135	110	242	128	136	37	81	63	54	19	1
2,627	485	<sup>12</sup> 1,462	387	102	55	370	290	131	352	89	129	(NA)	2
1,607	365	<sup>12</sup> 1,160	204	61	28	226	167	176	116	56	78	12	3
752	164	229	139	33	4	(NA)	(NA)	68	139	54	92	10	4
1,383	220	464	230	69	15	618	460	(NA)	(NA)	(NA)	140	6	5
5,131	1,270	3,761	479	1,362	1,485	2,096	-	70	2,098	3	377	61	6
2,882	1,614	<sup>12</sup> 3,252	614	1,077	121	1,831	39	329	2,115	-	426	(NA)	7
2,397	1,302	<sup>12</sup> 2,801	449	743	335	1,286	-	2,904	1,092	2	361	46	8
140	42	38	15	35	-	(NA)	(NA)	15	72	-	18	2	9
34,170	11,049	41,747	3,253	4,145	12,334	8,555	4,401	4,147	4,687	2,694	2,386	434	10
34,439	9,983	57,027	4,525	2,505	69,613	20,092	16,499	64,578	19,660	828	2,344	(NA)	11
11,908	2,660	9,844	2,263	505	7,462	5,336	5,494	4,289	3,842	1,168	1,266	165	12
497	112	244	140	-	45	(NA)	(NA)	77	169	17	224	7	13
677	329	1,009	114	40	4	226	310	44	209	21	45	23	14
852	211	<sup>12</sup> 1,196	143	48	56	427	99	227	198	175	45	(NA)	15
338	109	<sup>12</sup> 655	41	32	132	748	121	212	105	639	12	19	16
49,889	8,946	27,156	2,947	5,771	22,230	9,059	939	4,177	8,065	1,930	2,692	704	17
79,425	13,971	29,930	4,062	7,325	40,505	10,033	3,818	1,879	9,683	1,211	3,881	(NA)	18
113,932	21,997	29,027	3,932	8,787	51,226	9,270	1,438	2,241	4,767	2,048	7,198	1,506	19
107,798	12,252	25,489	3,920	6,524	11,170	(NA)	(NA)	1,771	2,882	322	19,716	1,091	20
229,967	21,282	43,367	7,420	6,509	6,802	5,580	7,902	(NA)	(NA)	(NA)	42,694	1,041	21
44,867	8,155	23,474	2,117	5,441	21,336	6,810	939	4,159	6,270	1,283	2,442	581	22
67,449	12,024	20,777	2,346	6,814	39,319	6,317	3,818	1,811	6,333	842	3,347	(NA)	23
98,678	19,392	20,224	2,038	8,397	50,156	5,667	1,438	2,148	3,367	931	6,589	1,072	24
104,378	11,482	22,496	3,275	6,430	11,029	(NA)	(NA)	1,771	1,974	221	19,455	1,018	25
229,967	21,282	43,367	7,420	6,509	6,802	5,580	7,902	(NA)	(NA)	(NA)	42,694	1,041	26
5,022	791	3,682	830	330	894	2,249	(X)	18	1,795	647	<sup>15</sup> 250	123	27
11,976	1,947	9,153	1,716	511	1,186	3,716	(X)	68	3,350	369	<sup>15</sup> 534	(NA)	28
15,254	2,605	8,803	1,894	390	1,070	3,603	(X)	93	1,400	1,117	<sup>15</sup> 609	434	29
3,420	770	2,993	645	94	141	(NA)	(X)	908		101	<sup>15</sup> 261	73	30
650,955	111,308	380,461	21,330	56,724	66,133	197,860	7,312	38,444	152,236	20,348	16,071	6,301	31
762,100	152,966	374,020	23,750	56,715	71,251	152,194	9,228	66,673	101,303	11,286	14,972	(NA)	32
767,347	110,068	323,548	17,324	47,859	55,570	122,318	3,876	34,706	66,569	14,936	15,411	6,347	33
432,188	44,488	88,516	5,432	24,895	1,910	(NA)	(NA)	5,321	22,471	2,967	22,587	3,373	34
574,919	58,647	106,560	7,529	30,739	1,890	34,947	16,928	(NA)	(NA)	(NA)	37,766	3,125	35
642,338	110,153	<sup>12</sup> 659,378	19,804	56,354	64,742	190,805	7,302	38,055	145,668	19,810	15,598	6,070	36
753,320	151,721	369,173	21,842	56,348	70,346	147,732	9,154	66,472	97,867	10,769	14,372	(NA)	37
759,659	109,100	319,930	15,925	47,569	54,613	119,159	3,861	34,486	64,208	14,482	14,914	6,108	38
430,564	44,183	88,093	5,299	24,749	1,899	(NA)	(NA)	5,305	22,357	2,947	22,339	3,344	39
2,245	515	<sup>12</sup> 1,788	200	304	287	4,336	10	247	4,316	60	140	76	40
2,261	432	1,133	210	260	33	1,522	74	69	1,236	53	111	(NA)	41
2,177	411	627	239	254	206	607	15	134	479	11	144	75	42
1,384	219	342	80	145	11	(NA)	(NA)	16	73	20	248	21	43
6,372	640	4,858	1,326	66	1,104	2,719	(X)	142	2,252	478	<sup>15</sup> 333	155	44
6,519	813	3,714	1,698	107	872	2,940	(X)	132	2,200	464	<sup>15</sup> 489	(NA)	45
5,511	557	2,991	1,160	36	751	2,552	(X)	86	1,882	443	<sup>15</sup> 353	164	46
240	86	81	53	1	(NA)	(NA)	(X)	41			(NA)	8	47

TABLE 4. Selected Statistics by Major Industry Group

(For explanation of column captions and for statement on the minimum size of establishments)

Major industry group, industry, and year	Operating companies  (number)	Establishments (number)			Value of net shipments and receipts <sup>2</sup>  (\$1,000)	Value added in mining  (\$1,000)	Persons engaged (number)				Man-hours worked by production, development, and exploration workers  (1,000)
		Total	Including mining operations <sup>1</sup>	Including preparation plants			Production, development, and exploration workers	Other employees <sup>3</sup>	Proprietors and firm members <sup>4</sup>		
									Total	Performing manual labor	
Oil and gas extraction-- Continued											
Natural gas liquids:											
1 1963.....	164	652	(X)	652	808,479	762,070	11,939	1,920	81	15	24,455
2 1958.....	176	593	(X)	593	706,915	587,580	13,445	3,069	52	8	26,947
3 1954.....	181	562	(X)	582	582,866	425,937	13,560	3,780	72	13	27,862
4 1939.....	295	685	(X)	736	96,338	(NA)	8,332	2,005	10	2	16,634
Drilling oil and gas wells services:											
5 1963.....	2,671	2,836	380	(X)	974,546	653,337	50,333	5,083	1,535	1,119	106,266
6 1958 <sup>10</sup> .....	2,911	3,064	592	(X)	902,721	587,440	52,274	7,137	3,206	1,346	109,470
7 1954 <sup>10</sup> .....	2,846	2,869	(NA)	(X)	968,129	623,967	62,145	5,831	3,399	1,684	133,216
8 1939 <sup>10</sup> .....	985	985	(NA)	(X)	128,107	(NA)	22,548	1,676	862	292	38,621
Oil and gas exploration services:											
9 1963.....	359	373	5	(X)	111,704	89,988	7,232	1,451	203	169	16,246
10 1958 <sup>10</sup> .....	329	347	3	(X)	86,108	64,353	7,559	1,998	279	127	16,695
11 1954.....	309	330	(NA)	(X)	<sup>16</sup> 114,815	81,301	10,010	1,478	191	148	23,978
Oil and gas field services, n.e.c.:											
12 1963.....	2,901	3,003	135	(X)	650,059	498,029	39,028	9,246	2,006	1,634	84,076
13 1958 <sup>10</sup> .....	2,456	2,504	128	(X)	575,702	455,994	38,212	9,066	2,567	1,453	86,060
14 1954.....	2,313	2,316	(NA)	(X)	<sup>16</sup> 543,460	413,276	39,976	6,449	2,846	1,268	90,081
Nonmetallic minerals mining:											
1963:											
15 Including operations in manufactures.....	8,497	10,302	10,087	6,781	2,678,609	2,066,014	118,623	<sup>3</sup> 24,044	<sup>4</sup> 4,331	<sup>4</sup> 3,548	253,624
16 Mineral industries only	7,079	8,421	8,206	6,549	2,272,580	1,744,774	98,355	22,883	4,331	3,548	212,786
1958:											
17 Including operations in manufactures.....	7,260	8,897	8,767	5,409	2,176,665	1,691,725	116,594	<sup>3</sup> 22,977	<sup>4</sup> 5,418	<sup>4</sup> 2,851	243,885
18 Mineral industries only	6,153	7,323	7,193	5,187	1,820,759	1,391,515	96,827	21,803	5,418	2,851	204,908
1954:											
19 Including operations in manufactures.....	7,578	9,298	9,292	6,420	1,756,918	1,373,485	116,612	<sup>3</sup> 17,089	<sup>3</sup> 6,739	<sup>3</sup> 3,693	254,369
20 Mineral industries only	6,630	8,081	8,073	6,216	1,517,716	1,179,849	97,112	16,329	6,571	3,573	214,806
21 1939 <sup>10</sup> .....	4,127	(NA)	5,097	3,459	323,043	255,702	81,287	9,113	2,164	819	161,824
22 1929 <sup>19</sup> .....	(NA)	4,004	4,557	(NA)	407,461	318,737	94,808	11,462	1,563	(NA)	(NA)
Dimension stone:											
1963:											
23 Including operations in manufactures.....	503	551	551	244	102,154	70,908	9,640	1,347	<sup>4</sup> 182	<sup>4</sup> 166	19,462
24 Mineral industry only.....	289	319	319	12	19,199	14,842	1,970	186	182	166	3,820
1958:											
25 Including operations in manufactures.....	504	557	557	231	83,446	67,131	10,825	1,425	<sup>4</sup> 269	<sup>4</sup> 175	20,679
26 Mineral industry only.....	306	335	335	9	15,719	13,076	2,055	251	269	175	3,690
1954:											
27 Including operations in manufactures.....	523	555	558	204	76,282	61,774	11,389	936	467	253	23,155
28 Mineral industry only.....	322	351	352	-	18,418	15,155	3,068	156	299	133	5,893
Mineral industry only:											
Dimension limestone:											
29 1963.....	59	61	61	3	3,268	2,947	286	40	40	37	568
30 1958.....	65	68	68	4	4,174	3,741	491	92	57	38	879
31 1954.....	63	65	65	-	3,398	2,942	472	28	72	41	872
32 1939.....	33	(NA)	40	-	1,541	1,368	617	55	13	(NA)	(NA)
Dimension granite:											
33 1963.....	49	66	66	1	9,195	6,513	773	51	20	18	1,645
34 1958.....	63	76	76	1	5,517	4,085	681	59	45	24	1,277
35 1954.....	79	86	86	-	5,738	4,590	917	50	55	25	1,769
36 1939.....	77	(NA)	93	-	3,268	2,674	1,163	75	59	(NA)	(NA)
Dimension stone, n.e.c.:											
37 1963.....	181	192	192	8	6,736	5,382	911	95	122	111	1,607

## and Industry: 1963 and Earlier Years—Continued

included for each year, see Introduction. For 1929, excludes data for service industries)

Principal expenses (\$1,000)						Purchased machinery installed <sup>3</sup> (\$1,000)	Capital expenditures (\$1,000)					Energy used <sup>3</sup> (million kwh. equivalent)	Aggregate horsepower <sup>4</sup> (1,000)	
Wages and salaries		Supplies and purchases for resale <sup>5</sup>	Purchased fuels <sup>5</sup>	Purchased electric energy <sup>5</sup>	Contract work <sup>5</sup>		Development and exploration of mineral property <sup>4</sup>	Preparation plant and other construction <sup>3</sup>	New machinery and equipment <sup>3</sup>	Used plant and equipment <sup>3</sup>				
Production, development, and exploration workers	Other employees <sup>3</sup>													
80,745	15,808	90,453	7,494	7,673	54,025	39,068	(X)	70,788	40,208	2,860	158,705	3,887	1	
75,739	20,580	46,026	4,521	4,696	44,983	39,836	(X)	53,566	40,441	923	142,130	(NA)	2	
63,983	21,074	43,891	1,964	3,190	36,726	65,752	(X)	55,794	51,227	2,938	113,449	2,902	3	
13,212	5,052	8,653	6,600	355	3,984	(NA)	(X)	1,461	10,620	949	54,979	772	4	
281,064	37,086	232,349	41,711	2,211	82,053	115,681	12,351	13,542	92,633	29,500	<sup>15</sup> 18,103	5,253	5	
239,328	49,915	241,491	40,942	1,261	51,366	84,457	12,953	3,322	68,149	17,594	<sup>15</sup> 22,617	(NA)	6	
264,797	39,515	298,789	36,704	320	46,048	120,385	23,416	1,939	99,722	28,391	<sup>15</sup> 23,302	4,265	7	
36,020	5,917	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	678	8	
36,915	10,913	23,036	3,102	156	5,204	10,064	-	826	10,545	355	<sup>15</sup> 547	877	9	
31,115	12,534	16,396	3,535	295	3,643	6,075	-	554	6,207	321	<sup>15</sup> 949	(NA)	10	
40,813	8,654	23,480	3,586	106	6,547	6,537	-	32	6,360	350	<sup>15</sup> 942	935	11	
199,414	66,335	184,909	26,376	1,888	13,696	62,010	348	7,461	53,827	6,518	<sup>15</sup> 5,821	4,057	12	
166,926	61,097	145,576	25,450	1,311	9,767	<sup>37</sup> 8,843	154	4,623	34,815	2,620	<sup>15</sup> 7,177	(NA)	13	
147,047	40,820	109,507	18,379	<sup>77</sup> 7	9,731	49,483	328	2,828	51,491	3,046	<sup>15</sup> 5,748	2,876	14	
595,630	<sup>3</sup> 166,341	<sup>5</sup> 470,615	<sup>5</sup> 96,155	<sup>5</sup> 62,835	<sup>5</sup> 78,088	<sup>3</sup> 175,551	<sup>4</sup> 16,081	<sup>3</sup> 51,770	<sup>3</sup> 157,139	<sup>3</sup> 26,481	<sup>3</sup> 56,792	<sup>4</sup> 11,343	15	
501,952	159,501	388,273	95,193	61,234	<sup>77</sup> 645	172,167	16,081	51,300	154,305	25,842	56,417	11,343	16	
494,494	<sup>3</sup> 145,582	<sup>5</sup> 7378,812	<sup>5</sup> 79,498	<sup>5</sup> 48,248	<sup>5</sup> 52,896	<sup>3</sup> 132,517	<sup>4</sup> 7,849	<sup>3</sup> 840,702	<sup>3</sup> 823,754	<sup>3</sup> 820,039	<sup>3</sup> 49,097	(NA)	17	
414,990	138,493	322,210	78,709	46,699	52,036	130,203	7,849	40,495	121,669	19,827	48,618	(NA)	18	
430,759	<sup>3</sup> 90,411	<sup>5</sup> 270,190	<sup>5</sup> 61,675	<sup>5</sup> 36,563	<sup>5</sup> 46,150	<sup>3</sup> 131,927	<sup>4</sup> 9,401	<sup>3</sup> 33,654	<sup>3</sup> 86,716	<sup>3</sup> 17,096	<sup>3</sup> 44,371	<sup>3</sup> 7,827	19	
363,678	86,235	227,389	60,872	35,099	45,516	130,154	9,292	33,347	85,503	16,816	43,769	7,684	20	
83,014	21,641	38,065	14,966	12,040	2,270	(NA)	(NA)	3,716	12,634	2,820	20,200	2,311	21	
116,691	31,608	54,319	17,098	15,547	1,760	20,814	5,135	(NA)	(NA)	(NA)	28,603	1,651	22	
39,061	7,698	27,961	1,606	2,039	1,073	4,146	<sup>4</sup> 33	765	3,365	894	651	(NA)	23	
6,986	858	3,519	644	438	630	762	33	295	531	255	276	79	24	
36,768	8,143	16,860	1,193	1,971	1,240	2,845	52	566	2,787	300	614	(NA)	25	
6,067	1,054	2,252	404	422	380	531	52	359	702	88	135	(NA)	26	
35,364	4,863	11,544	1,204	1,853	1,208	2,664	178	393	1,794	491	744	262	27	
7,938	687	2,482	401	389	574	891	69	86	581	211	142	94	28	
1,108	158	390	77	68	161	138	4	15	142	121	23	18	29	
1,592	528	385	87	78	91	294	15	70	388	29	33	(NA)	30	
1,429	127	586	87	54	52	158	-	-	89	36	34	18	31	
632	89	80	36	53	4	(NA)	(NA)	5	18	10	39	17	32	
3,271	330	2,297	328	221	181	273	23	123	186	53	185	28	33	
2,046	242	1,293	115	171	41	89	32	51	122	12	38	(NA)	34	
2,404	235	693	96	229	149	226	30	5	157	53	35	30	35	
1,297	182	313	67	200	14	(NA)	(NA)	14	50	21	77	29	36	
2,607	370	832	239	149	288	351	6	157	203	81	68	33	37	

TABLE 4. Selected Statistics by Major Industry Group

(For explanation of column captions and for statement on the minimum size of establishments

Major industry group, industry, and year	Operating companies (number)	Establishments (number)			Value of net shipments and receipts <sup>2</sup> (\$1,000)	Value added in mining (\$1,000)	Persons engaged (number)				Man-hours worked by production, development, and exploration workers (1,000)
		Total	Including mining operations <sup>1</sup>	Including preparation plants			Production, development, and exploration workers	Other employees <sup>3</sup>	Proprietors and firm members <sup>4</sup>		
									Total	Performing manual labor	
Nonmetallic minerals mining--Continued											
Crushed and broken stone--Continued											
1958:											
1 Including operations in manufactures.....	1,692	2,188	2,164	1,823	745,643	566,066	40,129	4,582	4 <sup>101</sup> ,323	4 <sup>10</sup> 611	86,174
2 Mineral industry only.....	1,609	1,969	1,945	1,823	606,910	449,419	35,148	6,582	1 <sup>01</sup> ,323	1 <sup>0</sup> 611	76,212
1954:											
3 Including operations in manufactures.....	1,638	2,174	2,174	1,798	579,853	436,565	39,619	3,429	3 <sup>1</sup> ,272	3 <sup>603</sup>	88,576
4 Mineral industry only.....	1,530	1,919	1,919	1,798	461,006	339,530	33,332	4,293	1,272	603	75,999
Mineral industry only:											
Crushed and broken limestone:											
5 1963.....	1,277	1,612	1,587	1,529	528,000	408,450	26,331	4,764	758	499	59,365
6 1958.....	1,181	1,463	1,446	1,392	447,466	334,803	26,453	5,054	1 <sup>01</sup> ,088	1 <sup>04</sup> 99	57,262
7 1954 <sup>10</sup> .....	1,174	1,447	1,443	1,362	323,703	239,604	24,925	3,315	1,017	490	56,335
8 1939 <sup>10</sup> .....	716	(NA)	918	(NA)	55,172	41,432	17,655	1,726	507	(NA)	(NA)
9 1929 <sup>10</sup> .....	(NA)	742	785	(NA)	66,908	(NA)	16,443	(NA)	(NA)	(NA)	(NA)
Crushed and broken granite:											
10 1963.....	95	150	150	140	89,562	61,702	3,449	611	43	41	7,894
11 1958.....	87	121	121	108	49,391	33,493	2,906	403	32	14	6,442
12 1954.....	75	101	99	88	1 <sup>6</sup> 30,875	22,201	2,344	206	55	24	5,607
13 1939.....	59	(NA)	79	74	7,030	5,042	2,100	232	22	10	4,574
14 1929.....	(NA)	86	89	(NA)	6,751	4,871	2,066	(NA)	(NA)	(NA)	(NA)
Crushed and broken stone, n.e.c.:											
15 1963.....	408	494	473	428	158,157	111,503	6,406	1,675	228	153	13,575
16 1958.....	341	385	378	323	110,053	81,123	5,789	1,125	1 <sup>0</sup> 203	1 <sup>09</sup> 8	12,508
17 1954 <sup>10</sup> .....	273	363	369	315	1 <sup>6</sup> 106,606	76,613	5,909	772	198	89	13,738
18 1939 <sup>10</sup> .....	229	(NA)	262	233	17,412	12,891	4,355	507	79	34	8,891
Sand and gravel:											
1963:											
19 Including operations in manufactures.....	4,729	5,241	5,209	3,840	746,220	582,696	35,919	47,100	42,525	42,220	76,390
20 Mineral industry only.....	4,141	4,616	4,584	3,840	666,566	513,728	33,042	7,100	2,525	2,220	70,620
1958:											
21 Including operations in manufactures.....	3,732	4,095	4,082	1 <sup>0</sup> 2,758	624,641	499,229	33,282	4 <sup>6</sup> ,430	4 <sup>10</sup> 2,957	4 <sup>101</sup> ,592	71,776
22 Mineral industry only.....	3,355	3,708	3,695	1 <sup>0</sup> 2,758	553,538	435,439	30,729	6,430	1 <sup>0</sup> 2,957	1 <sup>01</sup> ,592	66,674
23 1954 (mineral industry only).....	3,348	3,939	3,957	1 <sup>0</sup> 3,309	456,647	357,583	30,560	5,935	1 <sup>0</sup> 3,523	1 <sup>01</sup> ,913	70,178
24 1939 <sup>10</sup> .....	1,253	1,569	1,563	1,528	79,403	61,935	16,959	2,818	796	290	35,785
25 1929 <sup>10</sup> .....	(NA)	1,072	1,325	(NA)	112,447	89,235	18,061	3,967	268	(NA)	(NA)
Mineral industry only:											
Construction sand and gravel and industrial sand, n.e.c.:											
26 1963.....	4,055	4,484	4,455	3,716	621,498	478,241	31,055	6,590	2,464	2,180	66,336
27 1958.....	3,218	3,539	3,529	1 <sup>0</sup> 2,618	509,588	402,671	28,367	5,908	1 <sup>0</sup> 2,869	1 <sup>01</sup> ,536	61,927
28 1954.....	3,204	3,764	3,774	1 <sup>0</sup> 3,156	1 <sup>6</sup> 436,845	334,900	28,450	5,669	1 <sup>0</sup> 3,408	1 <sup>01</sup> ,852	65,675
29 1939 <sup>10</sup> .....	1,129	1,383	1,380	1,383	69,130	53,870	14,584	2,445	711	253	31,324
30 1929 <sup>10</sup> .....	(NA)	957	1,165	(NA)	102,312	81,159	15,994	3,672	249	(NA)	(NA)
Glass sand:											
31 1963.....	32	39	38	39	28,753	22,649	1,223	347	6	3	2,738
32 1958.....	39	45	42	39	1 <sup>6</sup> 28,343	20,672	1,339	289	14	8	2,833
33 1954.....	40	44	44	38	1 <sup>6</sup> 18,591	13,701	1,144	151	26	11	2,505
34 1939.....	32	40	39	40	6,137	4,625	1,280	242	5	1	2,667
35 1929.....	(NA)	25	32	(NA)	5,359	4,082	1,030	95	-	(NA)	(NA)
Molding sand:											
36 1963.....	68	93	91	85	16,315	12,838	764	163	55	49	1,546
37 1958.....	98	124	124	101	1 <sup>6</sup> 16,373	12,096	1,023	233	74	48	1,914
38 1954.....	105	131	139	115	1 <sup>6</sup> 11,762	8,982	966	115	89	50	1,998
39 1939.....	97	146	144	105	4,136	3,440	1,095	131	80	36	1,794
40 1929.....	(NA)	90	128	(NA)	4,776	3,994	1,037	200	19	(NA)	(NA)
Bentonite:											
41 1963.....	31	44	44	32	1 <sup>6</sup> 18,105	11,435	644	167	13	8	1,508
42 1958.....	29	41	41	25	1 <sup>6</sup> 16,843	12,220	543	145	21	6	1,140
43 1954.....	29	43	43	28	1 <sup>6</sup> 21,830	16,350	578	56	23	7	1,340
44 1939.....	27	(NA)	29	20	1,982	1,463	357	62	4	1	687

See footnotes at end of table.

# and Industry: 1963 and Earlier Years—Continued

included for each year, see Introduction. For 1929, excludes data for service industries)

Principal expenses (\$1,000)						Purchased machinery installed <sup>3</sup> (\$1,000)	Capital expenditures (\$1,000)					Energy used <sup>3</sup> (million kwh. equivalent)	Aggregate horsepower <sup>4</sup> (1,000)	
Wages and salaries		Supplies and purchases for resale <sup>5</sup>	Purchased fuels <sup>5</sup>	Purchased electric energy <sup>5</sup>	Contract work <sup>5</sup>		Development and exploration of mineral property <sup>4</sup>	Preparation plant and other construction <sup>3</sup>	New machinery and equipment <sup>3</sup>	Used plant and equipment <sup>3</sup>				
Production, development, and exploration workers	Other employees <sup>3</sup>													
171,549 148,408	<sup>4</sup> 41,393 41,393	<sup>5</sup> 7156,105 7134,019	<sup>5</sup> 721,809 721,809	<sup>5</sup> 714,513 714,513	<sup>5</sup> 16,251 16,251	(NA) 51,828	(NA) 1,959	(NA) <sup>8</sup> 16,161	(NA) <sup>8</sup> 44,398	(NA) <sup>8</sup> 6,828	(NA) 8,371	(NA) (NA)	(NA) 2	
146,663 123,247	<sup>4</sup> 222,820 22,820	<sup>5</sup> 109,011 87,199	<sup>5</sup> 16,135 16,135	<sup>5</sup> 11,926 11,926	<sup>5</sup> 10,744 10,744	(NA) 44,971	(NA) 1,390	(NA) 11,925	(NA) 26,487	(NA) 5,400	(NA) 6,916	(NA) 2,797	(NA) 3 4	
126,791 111,551 90,715 17,064 19,437	33,797 32,154 17,103 3,850 (NA)	96,967 97,344 58,726 7,720 12,693	18,960 17,442 11,913 2,735 2,399	13,930 10,881 8,634 2,780 2,592	16,409 12,557 7,336 507 (NA)	40,644 39,088 32,622 (NA) (NA)	1,034 1,752 1,219 (NA) (NA)	11,829 <sup>8</sup> 12,411 7,638 (NA) (NA)	37,213 <sup>8</sup> 34,995 19,153 (NA) (NA)	9,459 <sup>8</sup> 5,370 3,963 (NA) (NA)	6,484 6,892 4,956 (NA) (NA)	3,219 (NA) 2,183 670 276	5 6 7 8 9	
16,010 10,771 7,573 1,782 2,162	3,816 2,204 1,306 573 (NA)	22,734 12,351 <sup>12</sup> 6,506 1,405 1,273	1,867 674 747 223 209	1,883 1,309 838 334 359	2,175 634 729 26 (NA)	6,486 5,838 3,041 (NA) (NA)	146 61 13 (NA) (NA)	1,782 948 844 75 (NA)	4,425 3,310 1,841 210 (NA)	832 384 489 50 (NA)	812 384 282 166 (NA)	362 (NA) 169 48 38	10 11 12 13 14	
35,042 26,086 24,445 4,806	13,659 7,035 4,330 1,138	37,644 24,327 22,271 2,904	5,256 3,693 3,421 682	3,994 2,324 2,399 849	5,015 <sup>5</sup> 3,060 2,669 86	12,877 6,902 9,082 (NA)	222 146 155 (NA)	5,130 <sup>8</sup> 2,802 3,436 194	9,175 <sup>8</sup> 6,093 5,353 484	1,440 <sup>8</sup> 1,074 924 163	2,655 1,080 1,659 487	688 (NA) 430 (NA)	15 16 17 18	
183,147 170,333	<sup>3</sup> 41,827 41,827	<sup>5</sup> 120,305 109,619	<sup>5</sup> 29,269 29,269	<sup>5</sup> 17,046 17,046	<sup>5</sup> 22,356 22,356	(NA) 57,953	(NA) 1,191	(NA) 14,237	(NA) 49,850	(NA) 10,446	(NA) 10,176	(NA) 4,851	(NA) 19 20	
145,932 134,820 119,256 18,822 25,385	<sup>3</sup> 37,937 37,937 28,357 6,393 11,630	<sup>5</sup> 796,427 789,114 761,789 8,493 12,946	<sup>5</sup> 725,342 725,342 721,373 4,632 4,452	<sup>5</sup> 714,099 714,099 79,997 3,805 5,353	<sup>5</sup> 715,367 715,367 714,692 538 461	(NA) 38,499 47,892 (NA) 7,963	(NA) 1,842 <sup>10</sup> 1,649 (NA) 62	(NA) <sup>8</sup> 14,894 87,866 1,029 (NA)	(NA) <sup>8</sup> 29,005 <sup>8</sup> 28,599 4,238 (NA)	(NA) <sup>8</sup> 10,851 <sup>8</sup> 8,014 1,064 (NA)	(NA) 8,607 9,065 4,281 6,681	(NA) (NA) 3,220 669 545	21 22 23 24 25	
159,907 125,181 111,890 16,482 22,780	38,121 34,634 26,968 5,447 10,746	103,609 781,371 757,653 7,432 11,917	26,901 723,085 719,758 4,156 3,990	15,251 712,471 78,797 3,273 4,921	21,540 714,672 713,919 399 325	54,219 35,207 46,023 (NA) 7,174	1,176 1,808 <sup>10</sup> 1,573 (NA) -	13,484 <sup>8</sup> 13,569 <sup>8</sup> 7,420 (NA) (NA)	45,947 <sup>8</sup> 26,664 <sup>8</sup> 27,295 3,752 (NA)	10,215 <sup>8</sup> 10,807 <sup>8</sup> 7,917 1,028 (NA)	8,845 7,260 7,986 3,645 5,832	4,669 (NA) 3,078 643 517	26 27 28 29 30	
6,650 5,730 4,279 1,456 1,314	2,490 1,767 819 600 278	4,223 <sup>12</sup> 5,520 3,208 747 675	1,464 1,265 840 322 282	1,330 1,084 807 366 305	322 145 166 77 15	2,977 2,360 965 (NA) 433	6 19 34 (NA) 50	642 1,012 258 124 (NA)	3,144 1,656 789 319 (NA)	206 16 15 5 (NA)	979 966 746 496 542	101 (NA) 55 29 13	31 32 33 34 35	
3,776 3,909 3,087 884 1,291	1,216 1,536 570 346 606	1,787 <sup>12</sup> 2,300 928 314 354	904 992 775 154 180	465 544 393 166 127	494 550 607 62 121	757 932 904 (NA) 356	9 15 42 (NA) 12	111 313 188 35 (NA)	759 685 515 167 (NA)	25 28 82 31 (NA)	352 381 333 140 307	81 (NA) 87 27 15	36 37 38 39 40	
3,141 1,996 1,920 309	986 889 215 137	<sup>12</sup> 4,349 <sup>12</sup> 2,406 <sup>12</sup> 2,916 396	681 720 468 59	514 390 305 26	1,348 1,181 1,829 38	1,134 1,009 604 (NA)	112 125 15 (NA)	358 4 81 15	727 946 392 63	159 8 154 40	614 576 369 81	42 (NA) 36 7	41 42 43 44	

TABLE 4. Selected Statistics by Major Industry Group

(For explanation of column captions and for statement on the minimum size of establishments

Major industry group, industry, and year	Operating companies (number)	Establishments (number)			Value of net shipments and receipts <sup>2</sup> (\$1,000)	Value added in mining (\$1,000)	Persons engaged (number)				Man-hours worked by production, development, and exploration workers (1,000)
		Total	Including mining operations <sup>1</sup>	Including preparation plants			Production, development, and exploration workers	Other employees <sup>3</sup>	Proprietors and firm members <sup>4</sup>		
									Total	Performing manual labor	
Nonmetallic minerals mining--Continued											
Fire clay:											
1963:											
1 Including operations in manufactures.....	228	293	293	38	40,333	30,596	2,057	4118	4121	489	4,041
2 Mineral industry only.....	134	155	155	38	16,898	12,640	861	118	121	89	1,640
1958:											
3 Including operations in manufactures.....	235	317	317	31	32,759	25,848	2,084	4194	4122	459	3,824
4 Mineral industry only.....	136	182	182	31	18,421	14,540	1,279	194	122	59	2,214
1954:											
5 Including operations in manufactures.....	279	353	357	61	31,659	24,335	3,011	3185	3167	374	5,542
6 Mineral industry only.....	180	248	252	61	22,046	17,468	1,802	185	167	74	3,123
7 1939.....	200	(NA)	306	44	7,178	6,168	3,655	255	108	41	5,642
8 1929 <sup>20</sup> .....	(NA)	199	236	(NA)	10,753	8,469	4,139	363	72	(NA)	(NA)
Fuller's earth:											
9 1963.....	15	15	15	12	<sup>16</sup> 12,954	9,071	653	105	5	1	1,363
10 1958.....	13	14	14	11	<sup>16</sup> 8,692	5,955	527	125	7	-	1,145
11 1954.....	15	16	19	13	6,012	4,179	510	54	8	4	1,109
12 1939.....	21	(NA)	22	18	2,107	1,402	562	116	2	-	1,051
13 1929.....	(NA)	22	24	(NA)	4,812	3,589	991	105	-	-	(NA)
Kaolin and ball clay:											
14 1963.....	39	48	48	37	<sup>16</sup> 65,073	49,841	2,916	430	21	12	6,123
15 1958.....	41	53	53	43	<sup>16</sup> 42,434	30,990	2,722	672	18	6	5,675
1954:											
16 Including operations in manufactures.....	48	62	69	38	34,410	26,748	2,843	4328	319	37	6,205
17 Mineral industry only.....	40	54	61	38	31,878	25,249	2,820	328	19	7	6,159
18 1939.....	75	(NA)	95	53	7,239	5,437	3,168	266	26	3	5,987
Feldspar:											
19 1963.....	24	31	31	17	8,429	6,117	394	67	9	8	850
20 1958.....	64	74	74	12	6,433	4,531	496	71	52	44	1,028
21 1954.....	58	84	110	22	6,239	4,048	579	37	84	70	1,235
22 1939.....	47	(NA)	59	2	981	859	512	54	39	21	1,016
23 1929.....	(NA)	51	58	(NA)	1,935	1,599	598	95	10	(NA)	(NA)
Clay and related minerals, n.e.c.:											
1963:											
24 Including operations in manufactures.....	495	649	649	65	<sup>16</sup> 75,282	52,946	3,599	(NA)	(NA)	(NA)	7,392
25 Mineral industry only.....	115	130	130	65	<sup>16</sup> 38,944	24,481	1,679	282	39	37	3,577
1958:											
26 Including operations in manufactures <sup>10</sup> .....	529	703	703	61	<sup>16</sup> 65,795	49,410	3,500	(NA)	(NA)	(NA)	7,232
27 Mineral industry only.....	113	126	126	61	<sup>16</sup> 29,274	19,132	1,731	268	52	31	3,695
1954:											
28 Including operations in manufactures.....	678	805	806	85	<sup>16</sup> 40,693	30,481	3,774	(NA)	(NA)	(NA)	7,612
29 Mineral industry only.....	173	187	188	85	<sup>16</sup> 15,159	11,155	1,174	109	100	51	2,411
30 1939.....	527	(NA)	621	76	7,877	6,413	3,205	89	78	8	6,083
Barite:											
31 1963.....	45	54	54	27	16,536	11,107	911	523	33	23	1,887
32 1958.....	41	53	52	35	<sup>16</sup> 13,768	11,321	781	446	33	19	1,588
33 1954.....	36	44	45	35	18,269	14,051	1,036	89	35	18	2,403
34 1939.....	37	(NA)	47	32	2,065	1,652	792	62	16	4	1,439
35 1929.....	(NA)	(NA)	44	(NA)	1,802	1,489	844	71	9	(NA)	(NA)
Fluorspar:											
36 1963.....	28	30	24	16	12,340	8,869	682	122	4	4	1,346
37 1958.....	50	55	51	27	16,639	12,653	1,044	191	66	27	2,105
38 1954.....	94	104	105	33	13,733	9,914	997	263	114	82	2,001
39 1939.....	60	(NA)	61	53	3,397	2,655	1,287	109	49	13	2,568
40 1929.....	(NA)	28	36	(NA)	2,858	2,038	1,053	118	13	(NA)	(NA)
Potash, soda, borate minerals:											
41 1963.....	19	23	23	19	<sup>16</sup> 192,116	156,151	4,822	2,228	5	3	9,849



## and Industry: 1963 and Earlier Years—Continued

included for each year, see Introduction. For 1929, excludes data for service industries)

Principal expenses (\$1,000)						Purchased machinery installed <sup>3</sup> (\$1,000)	Capital expenditures (\$1,000)				Energy used <sup>3</sup> (million kwh. equivalent)	Aggregate horsepower <sup>4</sup> (1,000)	
Wages and salaries		Supplies and purchases for resale <sup>5</sup>	Purchased fuels <sup>5</sup>	Purchased electric energy <sup>5</sup>	Contract work <sup>5</sup>		Development and exploration of mineral property <sup>4</sup>	Preparation plant and other construction <sup>3</sup>	New machinery and equipment <sup>3</sup>	Used plant and equipment <sup>3</sup>			
Production, development, and exploration workers	Other employees <sup>3</sup>												
9,427 3,795	<sup>4</sup> 813 813	<sup>5</sup> 8,210 2,731	<sup>5</sup> 637 637	<sup>5</sup> 239 239	<sup>5</sup> 944 944	(NA) 2,004	(NA) 195	(NA) 574	(NA) 1,131	(NA) 259	(NA) 176	(NA) 86	1 2
8,606 4,989	<sup>4</sup> 1,031 1,031	<sup>5</sup> 5,148 2,118	<sup>5</sup> 1,090 1,090	<sup>5</sup> 264 264	<sup>5</sup> 830 830	(NA) 1,695	(NA) 189	(NA) 153	(NA) 1,562	(NA) 203	(NA) 382	(NA) (NA)	3 4
9,783 5,670 3,366 3,758	<sup>3</sup> 928 928 499 841	<sup>5</sup> 4,729 1,983 622 1,494	<sup>5</sup> 639 639 115 525	<sup>5</sup> 305 305 130 245	<sup>5</sup> 1,686 1,686 143 20	(NA) 1,292 (NA) 459	(NA) 79 (NA) 94	(NA) 184 34 (NA)	(NA) 925 112 (NA)	(NA) 139 41 (NA)	(NA) 300 127 944	(NA) 100 32 32	5 6 7 8
2,423 1,673 1,381 438 853	644 726 363 308 303	2,525 <sup>12</sup> 1,754 840 374 425	1,035 748 538 164 385	321 270 218 95 62	370 281 223 72 351	805 263 539 (NA) 98	- 25 - (NA) 90	293 231 84 17 (NA)	776 321 413 61 (NA)	104 2 28 7 (NA)	748 323 296 185 411	35 (NA) 23 15 8	9 10 11 12 13
14,500 9,719	3,218 4,295	<sup>12</sup> 11,924 <sup>12</sup> 8,739	3,236 2,157	1,875 1,194	674 592	3,764 2,913	478 330	584 1,053	4,094 2,676	81 92	2,547 1,433	192 (NA)	14 15
8,174 8,115 1,830	<sup>3</sup> 1,828 1,828 637	<sup>5</sup> 4,609 4,576 896	<sup>5</sup> 1,524 1,524 530	<sup>5</sup> 857 857 241	<sup>5</sup> 1,362 1,362 135	(NA) 2,601 (NA)	(NA) 109 (NA)	(NA) 1,449 203	(NA) 2,733 958	(NA) - 59	(NA) 1,134 750	(NA) 97 33	16 17 18
1,749 1,515 1,523 383 527	214 404 199 113 203	1,889 1,055 1,400 81 239	331 324 238 28 21	460 396 302 8 62	602 156 365 5 14	732 1,277 294 (NA) 28	210 22 36 (NA) 32	907 208 94 7 (NA)	468 1,053 259 37 (NA)	117 23 19 2 (NA)	155 127 102 6 25	40 (NA) 30 6 7	19 20 21 22 23
16,617 8,507	(NA) 2,181	<sup>5</sup> 14,365 6,492	<sup>5</sup> 5,550 5,550	<sup>5</sup> 1,610 1,610	<sup>5</sup> 1,137 1,137	(NA) 2,642	(NA) 133	(NA) 583	(NA) 1,969	(NA) 307	(NA) 4,038	(NA) 133	24 25
14,042 6,988	(NA) 1,932	<sup>5</sup> 11,708 5,465	<sup>5</sup> 4,566 4,566	<sup>5</sup> 1,071 1,071	<sup>5</sup> 824 824	(NA) 2,187	(NA) 62	(NA) 1,836	(NA) 1,940	(NA) 133	(NA) 2,636	(NA) (NA)	26 27
11,943 3,881 3,161	(NA) 481 149	<sup>5</sup> 8,839 <sup>12</sup> 2,631 727	<sup>5</sup> 1,244 1,244 397	<sup>5</sup> 428 428 230	<sup>5</sup> 1,190 1,190 110	(NA) 1,178 (NA)	(NA) 48 (NA)	(NA) 699 42	(NA) 987 202	(NA) 135 87	(NA) 1,142 427	(NA) 74 (NA)	28 29 30
3,605 2,698 3,451 597 648	3,194 2,479 423 155 186	<sup>12</sup> 3,758 <sup>12</sup> 1,953 2,251 246 155	374 281 327 94 58	831 554 552 52 76	957 381 850 21 24	742 251 1,250 (NA) 154	20 204 24 (NA) 12	440 426 78 31 (NA)	526 307 853 57 (NA)	115 36 57 39 (NA)	271 198 269 56 84	60 (NA) 68 10 6	31 32 33 34 35
3,037 4,336 3,451 1,134 1,112	944 1,280 1,415 228 290	2,258 2,504 2,195 506 626	456 563 495 118 153	595 594 513 61 24	320 1,127 804 57 17	268 764 561 (NA) 140	15 627 140 (NA) 157	163 160 145 106 (NA)	89 702 429 429 (NA)	46 77 35 27 (NA)	331 379 380 358 387	24 (NA) 49 21 7	36 37 38 39 40

TABLE 4. Selected Statistics by Major Industry Group

(For explanation of column captions and for statement on the minimum size of establishments

	Major industry group, industry, and year	Operating companies  (number)	Establishments (number)			Value of net shipments and receipts <sup>2</sup>  (\$1,000)	Value added in mining  (\$1,000)	Persons engaged (number)				Man-hours worked by production, development, and exploration workers  (1,000)
			Total	Including mining operations <sup>1</sup>	Including preparation plants			Production, development, and exploration workers	Other employees <sup>3</sup>	Proprietors and firm members <sup>4</sup>		
										Total	Performing manual labor	
Nonmetallic minerals mining--Continued												
Rock salt:												
1	1963.....	20	25	23	20	58,630	49,539	1,812	631	7	5	4,260
2	1958.....	18	22	22	21	<sup>16</sup> 41,813	34,073	1,602	382	7	4	3,508
3	1954.....	11	15	15	13	35,581	30,013	1,659	266	3	1	3,861
4	1939.....	17	(NA)	17	17	6,896	5,721	1,380	181	4	4	2,608
Sulfur:												
5	1963.....	11	17	17	3	113,103	100,349	1,600	1,003	4	4	3,264
6	1958.....	14	24	24	5	106,202	94,063	2,303	1,374	2	-	4,644
7	1954.....	12	20	16	5	140,685	124,166	3,077	1,018	-	-	6,229
8	1939.....	8	(NA)	10	2	31,812	28,863	1,517	507	1	1	3,031
9	1929.....	(NA)	9	10	(NA)	37,126	29,302	2,199	305	1	(NA)	(NA)
Chemical-fertilizer mining, n.e.c.:												
10	1963.....	19	20	20	10	<sup>16</sup> 18,270	12,409	772	310	9	7	1,560
11	1958.....	22	24	24	12	<sup>16</sup> 15,760	9,745	1,606	414	3	2	2,619
12	1954.....	25	27	24	17	<sup>16</sup> 14,963	14,671	1,056	198	15	7	2,125
13	1939 <sup>21</sup> .....	8	(NA)	7	4	602	458	189	15	5	1	348
Nonmetallic minerals services:												
14	1963.....	118	119	(X)	(X)	13,244	9,326	806	65	89	66	1,575
15	1958.....	74	75	(X)	(X)	7,934	6,217	1,037	72	79	44	1,893
16	1954.....	62	62	(X)	(X)	6,301	4,884	614	25	67	26	1,258
17	1939.....	65	65	(X)	(X)	966	725	307	28	68	27	632
Gypsum:												
18	1963:											
	Including operations in manufactures.....	40	74	74	25	38,876	33,640	1,104	(NA)	(NA)	(NA)	2,249
19	Mineral industry only.....	33	37	37	25	10,160	7,753	383	75	19	17	807
20	1958:											
	Including operations in manufactures.....	36	64	64	19	34,172	29,753	1,219	(NA)	(NA)	(NA)	2,506
21	Mineral industry only.....	29	32	32	19	7,048	5,958	354	52	20	10	776
22	1954:											
	Including operations in manufactures.....	38	64	61	22	<sup>16</sup> 31,861	27,642	1,428	(NA)	(NA)	(NA)	2,984
23	Mineral industry only.....	34	37	34	22	<sup>16</sup> 6,631	5,352	399	50	21	7	926
24	1939.....	34	(NA)	59	25	4,569	3,756	1,327	97	7	-	2,466
25	1929.....	(NA)	60	63	(NA)	5,740	4,516	2,078	134	2	(NA)	(NA)
Mica:												
26	1963.....	31	34	34	18	<sup>16</sup> 5,560	3,925	357	41	9	9	733
27	1958.....	142	149	149	56	6,216	4,974	649	78	189	115	1,204
28	1954 <sup>10</sup> .....	446	498	510	444	4,092	3,284	668	42	549	432	1,196
29	1939 <sup>10</sup> .....	22	(NA)	21	10	327	276	190	20	11	7	361
30	1929 <sup>10</sup> .....	(NA)	24	32	(NA)	516	415	226	23	1	(NA)	(NA)
Native asphalt and bitumens:												
31	1963.....	11	13	13	10	<sup>16</sup> 8,509	6,333	357	65	5	2	728
32	1958.....	8	10	10	9	8,041	5,954	367	97	4	-	732
33	1954.....	9	12	12	8	6,424	4,857	451	100	12	3	987
34	1939.....	23	(NA)	23	15	2,968	2,554	730	123	7	1	1,330
35	1929.....	(NA)	21	25	(NA)	5,124	4,345	1,123	183	1	(NA)	(NA)
Pumice and pumicite:												
36	1963.....	83	85	85	51	5,338	4,198	222	25	46	37	428
37	1958.....	69	70	70	28	5,482	4,387	303	51	34	12	471
38	1954 <sup>10</sup> .....	73	75	75	47	<sup>16</sup> 3,393	2,741	223	44	59	35	440
39	1939 <sup>10</sup> .....	15	17	17	14	387	301	122	5	12	5	197
Talc, soapstone, and pyrophyllite:												
40	1963.....	43	65	65	32	17,272	13,746	1,054	222	31	30	2,229
41	1958.....	43	64	64	23	<sup>16</sup> 14,908	11,755	1,123	171	34	17	2,289
42	1954.....	54	68	75	39	11,563	9,486	1,297	174	30	14	2,778
43	1939.....	29	(NA)	38	26	3,269	2,441	970	167	17	10	2,068
44	1929.....	(NA)	25	28	(NA)	2,688	2,012	550	82	-	-	(NA)
Natural abrasives, except sand:												
45	1963.....	23	23	23	14	5,001	4,125	216	78	18	12	466
46	1958.....	20	20	20	16	3,373	2,648	204	25	16	8	408
47	1954.....	22	22	22	14	3,490	2,874	197	21	16	4	403
48	1939.....	27	(NA)	36	25	1,335	1,115	383	60	12	3	798

See footnotes at end of table.

# and Industry: 1963 and Earlier Years—Continued

included for each year, see Introduction. For 1929, excludes data for service industries)

Principal expenses (\$1,000)						Purchased machinery installed <sup>3</sup> (\$1,000)	Capital expenditures (\$1,000)				Energy used <sup>3</sup> (million kwh. equivalent)	Aggregate horsepower <sup>4</sup> (1,000)	
Wages and salaries		Supplies and purchases for resale <sup>5</sup>	Purchased fuels <sup>5</sup>	Purchased electric energy <sup>5</sup>	Contract work <sup>5</sup>		Development and exploration of mineral property <sup>4</sup>	Preparation plant and other construction <sup>3</sup>	New machinery and equipment <sup>3</sup>	Used plant and equipment <sup>3</sup>			
Production, development, and exploration workers	Other employees <sup>3</sup>												
11,142 7,937 7,117 1,434	4,813 3,059 1,454 540	<sup>12</sup> 10,108 <sup>12</sup> 7,363 5,351 868	509 311 335 153	957 455 367 151	427 93 244 3	5,158 2,125 1,534 (NA)	983 9 53 (NA)	556 480 873 149	5,688 2,118 1,259 143	174 - 1 69	502 416 549 336	106 (NA) 48 23	1 2 3 4
10,578 13,267 14,619 2,545 3,483	10,019 11,303 6,567 1,911 955	4,994 7,363 14,055 1,690 3,340	7,546 6,440 5,629 1,128 4,433	50 45 44 15 41	451 7,496 2,833 116 10	799 7,077 2,803 (NA) 1,634	3 - 3,069 (NA) 325	77 - 3,110 (NA) (NA)	986 - 2,635 252 (NA)	20 - 31 44 (NA)	11,583 11,819 12,854 4,129 7,318	151 (NA) 159 45 34	5 6 7 8 9
3,773 6,137 3,836 204	2,189 1,613 1,085 37	5,742 <sup>12</sup> 5,913 <sup>12</sup> 806 95	109 133 57 7	363 446 86 34	37 114 439 8	199 157 984 (NA)	72 - 116 (NA)	178 - 658 3	847 - 1,299 15	16 - 7 -	110 104 171 6	39 (NA) 43 3	10 11 12 13
4,209 3,038 2,214 320	372 484 113 48	2,667 1,289 1,088 124	602 379 354 113	70 51 11 4	951 146 213 (NA)	1,064 700 402 (NA)	(X) (X) (X) (X)	280 74 19 -	922 705 306 53	232 69 56 -	<sup>15</sup> 219 <sup>15</sup> 105 <sup>15</sup> 96 (NA)	69 (NA) 39 18	14 15 16 17
5,546 1,913	(NA) 493	<sup>5</sup> 4,680 1,851	<sup>5</sup> 297 297	<sup>5</sup> 224 224	<sup>5</sup> 450 450	(NA) 864	(NA) 90	(NA) 206	(NA) 862	(NA) 121	(NA) 122	(NA) 32	18 19
5,264 1,481	(NA) 324	<sup>5</sup> 4,304 975	<sup>5</sup> 166 166	<sup>5</sup> 118 118	<sup>5</sup> 73 73	(NA) 578	(NA) 28	(NA) 69	(NA) 682	(NA) 41	(NA) 74	(NA) 21	20 21
5,572 1,567 1,640 2,628	(NA) 285 217 307	<sup>5</sup> <sup>12</sup> 3,864 <sup>12</sup> 924 624 795	<sup>5</sup> 171 171 37 137	<sup>5</sup> 140 140 146 285	<sup>5</sup> 72 72 6 7	(NA) 2,395 (NA) 578	(NA) 13 (NA) 127	(NA) 48 27 (NA)	(NA) 402 254 (NA)	(NA) 1,960 22 (NA)	(NA) 85 29 172	(NA) 28 29 26	22 23 24 25
1,299 1,709 1,255 118 195	283 298 87 20 58	<sup>12</sup> 1,375 995 564 25 65	212 336 151 10 18	228 206 132 16 18	176 304 347 - -	504 577 474 (NA) 6	96 315 255 (NA) 14	95 218 188 1 (NA)	448 434 321 6 (NA)	221 204 96 2 (NA)	113 115 58 6 20	25 (NA) 17 2 2	26 27 28 29 30
1,723 1,398 1,443 608 1,255	518 867 704 284 586	1,085 1,538 1,251 317 518	178 79 137 68 138	342 270 85 28 39	1,025 406 170 1 84	627 517 476 (NA) 182	391 175 114 (NA) 39	199 19 24 26 (NA)	480 510 402 72 (NA)	11 19 12 17 182	75 50 66 125 285	34 (NA) 31 13 13	31 32 33 34 35
981 1,002 748 119	75 216 214 7	812 <sup>7</sup> 911 <sup>12</sup> 334 45	197 <sup>7</sup> 270 119 30	63 <sup>7</sup> 68 40 11	263 159 276 -	507 312 298 (NA)	80 54 32 (NA)	171 <sup>8</sup> 212 98 4	356 <sup>8</sup> 250 99 9	75 <sup>8</sup> 109 186 4	63 111 56 19	26 (NA) 26 2	36 37 38 39
5,390 4,157 4,141 807 615	1,237 1,163 799 382 217	2,973 <sup>12</sup> 2,428 1,671 619 531	269 291 238 45 29	662 547 467 162 99	302 276 412 2 17	468 509 486 (NA) 35	205 128 300 (NA) 57	220 169 453 62 (NA)	630 482 407 65 (NA)	93 119 37 38 (NA)	151 153 133 53 59	48 (NA) 36 12 11	40 41 42 43 44
1,048 801 698 346	535 206 187 133	900 513 504 149	157 181 161 50	151 22 33 21	88 70 139 -	79 88 79 (NA)	12 1 10 (NA)	258 42 240 30	203 106 74 51	25 - 8 7	70 73 75 109	17 (NA) 11 5	45 46 47 48

TABLE 4. Selected Statistics by Major Industry Group

(For explanation of column captions and for statement on the minimum size of establishments

Major industry group, industry, and year	Operating companies  (number)	Establishments (number)			Value of net shipments and receipts <sup>2</sup>  (\$1,000)	Value added in mining  (\$1,000)	Persons engaged (number)				Man-hours worked by production, development, and exploration workers  (1,000)
		Total	Including mining operations <sup>1</sup>	Including preparation plants			Production, development, and exploration workers	Other employees <sup>3</sup>	Proprietors and firm members <sup>4</sup>		
									Total	Performing manual labor	
Nonmetallic minerals mining--Continued											
Peat:											
1 1963.....	108	109	109	43	7,360	5,626	442	62	67	60	948
2 1958.....	80	81	81	60	4,370	3,640	335	54	59	47	613
3 1954.....	86	88	87	68	2,326	1,800	321	32	69	42	637
4 1939.....	23	(NA)	25	23	378	338	157	27	11	4	246
Nonmetallic minerals, n.e.c.:											
5 1963.....	81	87	87	68	42,911	32,619	1,578	300	25	22	3,324
6 1958.....	47	55	55	39	31,611	23,368	1,344	447	21	8	3,018
7 1954.....	63	70	75	57	24,595	17,437	1,374	394	33	14	2,703
8 1939.....	38	(NA)	37	30	3,041	2,153	630	104	16	5	1,395

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>For 1954 and earlier years, except for the Crude Petroleum and Natural Gas Industry, represents number of mines. In addition, for 1954, about 1,400 oil and gas field service establishment reports included oil or gas mining operations as a secondary activity. The comparable figure for 1939 is not available.

<sup>2</sup>For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, includes the estimated value of minerals produced and used in the same manufacturing establishment in making manufactured products.

<sup>3</sup>For 1963, 1958, and 1954, excludes data for crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments.

<sup>4</sup>For 1963 and 1958, excludes data for all mining operations in manufacturing establishments. For 1954, see footnote 3.

<sup>5</sup>For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments in 1963, 1958, and 1954, the cost of purchased fuels, purchased electric energy, and contract work is included with the cost of supplies and purchases for resale.

<sup>6</sup>Excludes data for industries other than placer gold, bituminous coal, and crude petroleum and natural gas in Alaska and Hawaii.

<sup>7</sup>Figures for purchased fuels and electric energy in Alaska and Hawaii are included with those for supplies and purchases for resale. In the separate figures for sand and gravel, figures for contract work are also so combined.

## and Industry: 1963 and Earlier Years—Continued

included for each year, see Introduction. For 1929, excludes data for service industries)

Principal expenses (\$1,000)						Purchased machinery installed <sup>3</sup>  (\$1,000)	Capital expenditures (\$1,000)				Energy used <sup>3</sup>  (million kwh. equivalent)	Aggregate horsepower <sup>4</sup>  (1,000)
Wages and salaries		Supplies and purchases for resale <sup>2</sup>	Purchased fuels <sup>3</sup>	Purchased electric energy	Contract work <sup>5</sup>		Development and exploration of mineral property <sup>4</sup>	Preparation plant and other construction <sup>3</sup>	New machinery and equipment <sup>3</sup>	Used plant and equipment <sup>3</sup>		
Production, development, and exploration workers	Other employees <sup>3</sup>											
1,473	305	1,002	423	91	350	738	9	48	603	210	101	26
974	308	762	174	34	134	446	137	111	455	108	79	(NA)
829	111	321	174	31	46	159	34	43	104	24	87	24
101	43	21	15	4	-	(NA)	(NA)	8	10	8	7	3
8,961	2,240	126,488	1,762	1,399	2,542	3,664	637	1,456	3,028	390	1,127	104
5,950	2,660	126,264	1,239	915	1,144	2,869	198	982	2,729	279	716	(NA)
5,258	2,062	4,649	967	722	1,336	1,441	109	820	1,001	27	620	76
636	209	593	159	128	8	(NA)	(NA)	(NA)	64	4	197	13

<sup>8</sup>Figures for preparation plant and other construction and for used plant and equipment in Alaska and Hawaii are included with those for new machinery and equipment.<sup>9</sup>Excludes data for the Uranium-Radium-Vanadium Ores Industry.<sup>10</sup>Excludes data for Alaska and Hawaii.<sup>11</sup>Represents number of mines and quarries, number of natural gas liquids plants, number of crude petroleum and natural gas establishments, and for mining services industries, number of operating companies.<sup>12</sup>Includes the cost of minerals received for preparation.<sup>13</sup>Figures for "other fuels" in Alaska are included with those for contract work; also for placer gold, figures for the cost of coal are so included.<sup>14</sup>Excludes data for nonproducing operations.<sup>15</sup>Excludes energy furnished without charge by operators of mineral properties.<sup>16</sup>Represents gross value of shipments and receipts.<sup>17</sup>Includes purchases for resale without further processing.<sup>18</sup>Excludes data for the Oil and Gas Field Services Industries.<sup>19</sup>Excludes data for common clay and shale operations. See also footnote 10.<sup>20</sup>Represents combined figures for the Fire Clay Industry, the Kaolin and Ball Clay Industry, and the Clay and Related Minerals, N.E.C., Industry.<sup>21</sup>Except for number of establishments, excludes data for 2 lithium minerals mines.

TABLE 5. General Statistics by Geographic

Geographic area and year		Establishments, number		All employees		Production, development, and exploration workers			Value added in mining  (\$1,000)
		Total <sup>1</sup>	With 20 or more employees	Number	Payroll  (\$1,000)	Number	Man-hours  (1,000)	Wages  (\$1,000)	
UNITED STATES									
Mineral industries only:									
1	1963.....	38,651	5,499	615,572	3,742,469	481,466	972,983	2,679,515	15,910,015
2	1958.....	36,392	6,045	733,941	3,749,015	565,392	1,080,512	2,611,980	13,385,195
3	1954.....	37,641	6,204	787,127	3,394,844	648,341	1,251,909	2,579,744	<sup>5</sup> 11,558,664
Including operations in manufactures:									
4	1963.....	40,532	5,743	637,001	3,842,987	501,734	1,013,821	2,773,193	16,231,255
5	1958.....	37,966	6,295	754,882	3,835,608	585,159	1,119,489	2,702,484	13,685,405
6	1954 <sup>7</sup> .....	38,858	6,466	807,387	3,466,101	667,821	1,291,472	2,646,825	<sup>5</sup> 11,752,300
7	1939 <sup>8</sup> .....	25,023	(NA)	856,389	1,174,771	774,130	1,287,852	970,546	2,679,828
DIVISIONS AND STATES									
New England:									
Mineral industries only:									
8	1963.....	350	58	3,950	22,914	3,159	6,776	16,659	42,353
9	1958.....	344	39	3,616	17,477	2,745	5,744	11,760	32,301
10	1954.....	385	40	4,069	15,683	3,456	7,581	12,434	32,104
Including operations in manufactures:									
11	1963.....	450	78	6,401	34,945	5,387	11,457	27,145	67,516
12	1958.....	443	58	6,521	29,670	5,230	10,852	21,527	53,958
13	1954 <sup>7</sup> .....	456	56	6,001	23,142	5,215	11,149	18,950	46,785
14	1939 <sup>8</sup> .....	332	(NA)	4,944	6,603	4,272	8,659	4,863	14,415
Maine:									
15	1963.....	64	8	510	2,119	475	973	1,955	3,699
16	1958.....	68	7	580	2,000	530	1,079	1,804	4,382
17	1954 <sup>7</sup> .....	77	10	699	2,268	653	1,330	2,060	4,304
18	1939 <sup>8</sup> .....	34	(NA)	420	448	379	659	376	1,134
New Hampshire:									
19	1963.....	39	4	340	1,922	270	587	1,429	3,687
20	1958.....	45	4	328	1,534	282	579	1,166	2,751
21	1954 <sup>7</sup> .....	44	4	319	1,108	285	574	918	1,913
22	1939 <sup>8</sup> .....	25	(NA)	307	353	266	535	266	777
Vermont:									
23	1963.....	61	14	2,064	9,449	1,857	4,024	8,198	16,355
24	1958.....	67	16	2,571	10,019	2,157	4,445	7,935	15,766
25	1954 <sup>7</sup> .....	62	16	2,050	7,445	1,881	4,009	6,524	15,512
26	1939 <sup>8</sup> .....	77	(NA)	1,695	2,016	1,574	3,148	1,719	(NA)
Massachusetts:									
27	1963.....	158	31	2,222	13,318	1,699	3,550	9,037	25,304
28	1958.....	144	15	1,903	10,281	1,357	2,826	6,348	18,656
29	1954 <sup>7</sup> .....	148	16	1,907	8,074	1,609	3,382	6,291	14,719
30	1939 <sup>8</sup> .....	112	(NA)	1,568	2,528	1,206	2,512	1,486	4,610
Rhode Island:									
31	1963.....	23	4	209	1,157	180	370	920	2,117
32	1958.....	22	4	212	897	174	322	704	1,863
33	1954 <sup>7</sup> .....	21	3	163	565	140	274	461	1,109
34	1939 <sup>8</sup> .....	21	(NA)	248	323	212	435	262	623
Connecticut:									
35	1963.....	105	17	1,056	6,980	906	1,953	5,606	16,354
36	1958.....	97	12	927	4,939	730	1,601	3,570	10,540
37	1954 <sup>7</sup> .....	104	7	833	3,682	647	1,580	2,696	9,228
38	1939 <sup>8</sup> .....	63	(NA)	706	935	635	1,370	754	2,241
Middle Atlantic:									
Mineral industries only:									
39	1963.....	4,080	523	62,495	364,213	50,867	99,760	273,682	740,308
40	1958.....	4,500	636	87,398	418,758	72,795	124,374	324,407	733,341
41	1954.....	5,320	782	120,795	483,943	105,017	177,172	392,232	<sup>5</sup> 767,158
Including operations in manufactures:									
42	1963.....	4,322	565	65,418	378,920	53,722	105,496	287,955	786,488
43	1958.....	4,750	783	90,387	431,426	75,702	130,121	336,614	779,189
44	1954 <sup>7</sup> .....	5,541	842	124,321	497,033	108,461	184,141	404,916	<sup>5</sup> 800,722
45	1939 <sup>8</sup> .....	3,953	(NA)	219,481	297,502	203,871	317,732	259,280	428,317
New York:									
46	1963.....	590	79	10,654	75,123	7,405	15,458	45,167	141,771
47	1958.....	622	82	10,460	60,533	7,177	15,142	37,400	129,591
48	1954 <sup>7</sup> .....	694	80	12,364	66,310	8,469	18,612	38,544	104,719
49	1939 <sup>8</sup> .....	518	(NA)	8,737	15,430	7,044	14,682	9,696	32,819

See footnotes at end of table.

# Area: 1963 and Earlier Years

Selected expenses (\$1,000)				Value of shipments and receipts <sup>4</sup>	Capital expenditures <sup>3</sup>	Energy used <sup>3</sup> (kwh. equivalent)		Aggregate horsepower <sup>3</sup>		
Supplies, purchases for resale, and purchased fuels and electric energy <sup>2</sup>	Minerals received for preparation	Contract work <sup>3</sup>	Purchased machinery installed <sup>3</sup>			Total	Per production worker	Total	Per production worker	
				(\$1,000)	(\$1,000)	(million)	(1,000)	(1,000 hp.)		
3,261,942	2,670,235	1,918,322	1,123,639	21,620,538	3,263,615	436,435	906	52,772	110	1
2,885,122	1,756,351	1,861,899	1,017,578	18,102,041	2,804,104	405,631	717	(NA)	(NA)	2
2,347,709	<sup>5</sup> 6708,930	1,828,519	1,214,263	<sup>5</sup> 14,921,297	2,726,171	373,168	576	40,877	63	3
3,346,847	2,673,723	1,918,765	1,127,023	22,030,055	3,267,558	436,810	893	52,772	110	4
2,944,092	1,758,277	1,862,759	1,019,892	18,463,817	2,806,608	406,110	708	(NA)	(NA)	5
2,392,777	<sup>5</sup> 6710,442	1,829,153	1,216,036	<sup>5</sup> 15,162,011	2,728,080	373,770	553	41,045	61	6
531,992	(NA)	220,984	(NA)	3,432,804	(NA)	224,898	291	14,160	18	7
13,357	724	1,596	5,260	56,167	7,123	790	250	392	124	8
11,496	122	1,392	2,693	44,034	3,970	711	259	(NA)	(NA)	9
8,808	135	1,166	3,404	41,325	4,292	541	157	257	74	10
22,373	1,115	1,716	6,059	90,743	8,036	884	164	392	124	11
16,416	550	1,603	3,374	71,232	4,669	874	167	(NA)	(NA)	12
11,861	454	1,361	3,715	59,559	4,617	638	122	286	55	13
3,362	(NA)	37	(NA)	17,814	(NA)	404	95	143	33	14
<sup>10</sup> 1,206	( <sup>10</sup> )	21	<sup>12</sup> 260	4,844	<sup>12</sup> 313	50	105	16	84	15
<sup>10</sup> 1,419	( <sup>10</sup> )	82	280	5,703	460	90	170	(NA)	(NA)	16
848	121	91	327	5,242	449	46	70	21	32	17
143	(NA)	2	(NA)	1,279	(NA)	16	42	11	29	18
<sup>11</sup> 1,916	<sup>11</sup> 28	<sup>11</sup> 209	<sup>12</sup> 320	5,670	<sup>12</sup> 470	44	163	25	150	19
<sup>11</sup> 823	112	<sup>11</sup> 195	<sup>12</sup> 174	3,858	<sup>12</sup> 224	<sup>15</sup> 34	121	(NA)	(NA)	20
565	51	66	188	2,510	273	29	102	15	53	21
126	(NA)	-	(NA)	903	(NA)	18	68	7	25	22
<sup>10</sup> 6,657	( <sup>10</sup> )	165	990	22,599	1,568	204	110	47	64	23
<sup>10</sup> 5,454	( <sup>10</sup> )	335	861	21,172	1,244	291	135	(NA)	(NA)	24
4,367	44	589	744	20,415	841	209	111	64	34	25
1,207	(NA)	6	(NA)	6,243	(NA)	93	59	32	20	26
<sup>10</sup> 8,439	( <sup>10</sup> )	504	2,799	33,816	3,230	384	226	146	120	27
5,024	-	417	988	23,831	1,254	264	195	(NA)	(NA)	28
3,684	201	292	1,696	18,866	1,726	185	115	102	63	29
983	(NA)	6	(NA)	5,599	(NA)	157	130	58	48	30
<sup>10</sup> 517	( <sup>10</sup> )	278	123	2,765	270	27	150	26	148	31
<sup>11</sup> 498	( <sup>11</sup> )	<sup>11</sup> 56	<sup>12</sup> 161	2,382	<sup>12</sup> 222	<sup>12</sup> 29	167	(NA)	(NA)	32
372	-	21	166	1,447	221	26	186	19	136	33
203	(NA)	2	(NA)	828	(NA)	25	118	7	33	34
<sup>10</sup> 4,836	( <sup>10</sup> )	428	1,326	21,049	1,895	175	193	132	197	35
3,737	10	407	766	14,286	1,174	162	222	(NA)	(NA)	36
2,025	37	302	594	11,079	1,107	143	221	65	100	37
700	(NA)	21	(NA)	2,962	(NA)	95	150	28	44	38
213,811	147,322	63,510	72,945	1,129,402	108,494	13,042	256	3,995	79	39
208,131	164,191	81,853	65,188	1,160,015	92,689	14,926	205	(NA)	(NA)	40
189,381	<sup>5</sup> 6177,420	102,288	68,629	<sup>5</sup> 1,229,313	75,539	19,300	184	4,994	48	41
226,823	147,387	63,563	73,131	1,188,674	108,718	13,077	243	3,995	79	42
216,227	164,236	81,874	<sup>13</sup> 65,407	1,213,971	<sup>13</sup> 92,962	14,958	198	(NA)	(NA)	43
198,416	<sup>5</sup> 6177,431	102,367	68,717	<sup>5</sup> 1,271,938	75,691	19,360	178	5,015	46	44
83,386	(NA)	17,539	(NA)	529,242	(NA)	30,072	148	2,772	14	45
39,199	3,320	5,103	8,444	182,449	15,388	3,185	430	734	110	46
31,925	4,979	4,038	6,058	163,658	12,933	2,772	386	(NA)	(NA)	47
28,672	340	5,028	12,234	138,508	12,485	3,268	386	687	81	48
6,982	(NA)	1,431	(NA)	41,230	(NA)	1,700	241	285	40	49



TABLE 5. General Statistics by Geographic

	Geographic area and year	Establishments, number		All employees		Production, development, and exploration workers			Value added in mining (\$1,000)
		Total <sup>1</sup>	With 20 or more employees	Number	Payroll (\$1,000)	Number	Man-hours (1,000)	Wages (\$1,000)	
	DIVISIONS AND STATES—Continued								
	Middle Atlantic:—Continued								
	Incl. operations in manufactures—Con.								
	New Jersey:								
1	1963.....	182	49	4,018	24,935	3,195	7,001	18,105	59,384
2	1958.....	150	44	3,859	19,955	2,923	5,814	13,836	40,663
3	1954 <sup>7</sup> .....	166	41	4,190	18,769	3,543	7,948	15,172	<sup>2</sup> 38,965
4	1939 <sup>8</sup> .....	137	(NA)	3,978	5,926	3,369	6,451	4,314	11,103
	Pennsylvania:								
5	1963.....	3,550	437	50,746	278,862	43,122	83,037	224,683	585,333
6	1958.....	3,978	557	76,068	350,938	65,602	109,165	285,378	608,935
7	1954 <sup>7</sup> .....	4,681	721	107,767	411,954	96,449	157,581	351,200	657,038
8	1939 <sup>8</sup> .....	3,298	(NA)	206,766	276,146	193,458	296,599	245,270	384,397
	East North Central:								
	Mineral industries only:								
9	1963.....	4,753	570	62,234	373,643	50,762	101,801	288,514	1,042,467
10	1958.....	4,313	659	74,732	385,398	60,937	114,357	292,921	936,363
11	1954.....	4,636	691	81,411	349,426	69,142	131,846	280,043	813,435
	Including operations in manufactures:								
12	1963.....	5,145	617	66,589	395,158	54,882	110,003	308,435	1,106,078
13	1958.....	4,662	712	78,967	404,040	64,974	122,056	310,336	994,314
14	1954 <sup>7</sup> .....	4,912	743	86,251	367,576	73,815	141,163	297,258	853,641
15	1939 <sup>8</sup> .....	3,989	(NA)	107,980	142,184	98,084	161,491	119,026	316,939
	Ohio:								
16	1963.....	1,704	198	19,250	112,315	15,756	31,810	84,179	247,090
17	1958.....	1,599	210	22,268	114,990	17,359	32,686	79,924	213,647
18	1954 <sup>7</sup> .....	1,793	220	23,742	98,839	19,510	37,247	74,881	184,997
19	1939 <sup>8</sup> .....	1,407	(NA)	27,343	33,852	24,948	41,312	28,749	51,914
	Indiana:								
20	1963.....	781	88	8,761	48,844	7,219	14,444	38,770	123,361
21	1958.....	781	109	10,418	50,579	8,591	15,783	38,547	117,928
22	1954 <sup>7</sup> .....	815	113	11,039	45,112	9,576	17,863	36,443	98,331
23	1939 <sup>8</sup> .....	576	(NA)	12,396	15,854	11,398	18,542	13,671	28,094
	Illinois:								
24	1963.....	1,521	215	22,675	138,394	18,657	37,593	109,690	461,558
25	1958.....	1,375	258	27,482	144,359	23,218	43,891	114,715	462,230
26	1954 <sup>7</sup> .....	1,384	269	30,494	128,189	26,964	49,370	108,516	378,595
27	1939 <sup>8</sup> .....	1,233	(NA)	48,887	65,418	44,422	68,509	54,325	165,538
	Michigan:								
28	1963.....	742	83	12,448	76,736	10,427	20,485	60,996	232,724
29	1958.....	574	91	14,672	74,712	12,210	22,699	60,782	165,464
30	1954 <sup>7</sup> .....	591	98	16,693	77,342	13,991	28,762	62,160	153,036
31	1939 <sup>8</sup> .....	620	(NA)	17,032	23,943	15,223	28,951	19,677	64,933
	Wisconsin:								
32	1963.....	397	33	3,455	18,869	2,823	5,671	14,800	41,345
33	1958.....	333	44	4,127	19,400	3,596	6,997	16,368	35,045
34	1954 <sup>7</sup> .....	329	43	4,283	18,094	3,774	7,921	15,258	38,682
35	1939 <sup>8</sup> .....	153	(NA)	2,322	3,117	2,093	4,177	2,604	6,460
	West North Central:								
	Mineral industries only:								
36	1963.....	3,551	393	44,119	249,771	34,852	70,324	180,932	1,069,300
37	1958.....	3,221	452	50,928	253,055	38,591	76,427	174,836	918,673
38	1954.....	3,320	470	51,567	213,366	43,170	86,965	167,642	<sup>2</sup> 785,763
	Including operations in manufactures:								
39	1963.....	3,767	422	46,405	260,529	36,948	74,712	190,378	1,106,535
40	1958.....	3,384	484	53,600	264,617	41,081	81,570	184,952	956,496
41	1954 <sup>7</sup> .....	3,435	499	54,163	223,255	45,589	92,437	176,690	<sup>2</sup> 813,247
42	1939 <sup>8</sup> .....	2,242	(NA)	44,826	59,270	39,593	70,332	46,611	213,735
	Minnesota:								
43	1963.....	365	73	13,679	93,324	10,295	19,704	61,237	372,995
44	1958.....	317	96	18,164	101,547	12,600	24,207	63,039	319,677
45	1954 <sup>7</sup> .....	300	88	17,756	78,444	14,499	27,923	58,942	293,990
46	1939 <sup>8</sup> .....	178	(NA)	8,145	13,385	6,866	13,215	9,987	91,572
	Iowa:								
47	1963.....	343	39	2,965	14,988	2,560	5,915	12,064	41,952
48	1958.....	335	44	3,146	13,620	2,689	5,884	10,863	41,102
49	1954 <sup>7</sup> .....	364	34	2,974	10,505	2,677	6,049	9,295	27,316
50	1939 <sup>8</sup> .....	383	(NA)	5,928	6,059	5,589	8,595	5,489	8,963

See footnotes at end of table.

# Area: 1963 and Earlier Years—Continued

Selected expenses (\$1,000)				Value of shipments and receipts <sup>4</sup>	Capital expenditures <sup>3</sup>	Energy used <sup>3</sup> (kwh. equivalent)		Aggregate horsepower <sup>3</sup>	
Supplies, purchases for resale, and purchased fuels and electric energy <sup>2</sup>	Minerals received for preparation	Contract work <sup>3</sup>	Purchased machinery installed <sup>3</sup>			Total	Per production worker	Total	Per production worker
				(\$1,000)	(\$1,000)	(million)	(1,000)	(1,000 hp.)	
19,553	641	723	5,142	77,863	7,580	910	285	256	89
11,974	80	830	<sup>13</sup> 2,311	51,961	<sup>13</sup> 3,897	655	224	(NA)	(NA)
11,301	<sup>5</sup> 482	1,283	3,477	<sup>5</sup> 51,455	4,029	699	197	208	59
2,926	(NA)	95	(NA)	14,124	(NA)	652	194	91	27
168,071	143,426	57,737	59,545	928,362	85,750	8,982	208	3,005	73
172,328	159,177	77,006	57,038	998,352	76,132	11,531	176	(NA)	(NA)
158,443	<sup>6</sup> 176,609	96,056	53,006	1,081,975	59,177	15,393	143	4,120	43
73,478	(NA)	16,013	(NA)	473,888	(NA)	27,720	134	2,396	12
276,176	153,115	108,065	111,602	1,487,774	203,651	18,707	369	<sup>5</sup> 5,379	106
245,385	130,043	66,048	73,860	1,324,808	126,891	18,184	298	(NA)	(NA)
198,264	<sup>6</sup> 60,623	81,106	99,520	1,094,500	158,448	16,318	236	4,274	62
292,685	153,255	108,174	112,248	1,567,987	204,453	18,824	343	<sup>5</sup> 5,379	106
256,869	130,069	66,267	<sup>13</sup> 74,453	1,394,462	<sup>13</sup> 127,510	18,317	282	(NA)	(NA)
207,177	<sup>6</sup> 60,659	81,202	100,208	1,143,779	159,108	16,597	225	4,324	57
56,604	(NA)	28,744	(NA)	402,287	(NA)	18,071	184	1,953	20
76,537	22,662	16,943	31,109	348,402	45,939	3,782	240	1,576	111
67,452	29,599	12,844	19,228	313,654	29,116	2,927	169	(NA)	(NA)
48,003	<sup>6</sup> 10,735	11,249	19,844	250,045	24,783	2,790	143	1,052	54
10,843	(NA)	1,473	(NA)	64,230	(NA)	2,715	109	367	15
<sup>10</sup> 36,020	( <sup>10</sup> )	7,981	16,422	163,909	19,875	1,933	268	614	104
30,468	2,372	6,220	12,922	154,118	15,792	1,724	201	(NA)	(NA)
25,502	18,429	6,589	13,270	145,816	16,305	1,506	157	572	60
7,955	(NA)	1,338	(NA)	37,387	(NA)	1,888	166	239	21
98,787	98,679	<sup>14</sup> 21,332	<sup>14</sup> 44,715	668,120	<sup>14</sup> 56,951	5,736	307	1,567	87
100,060	81,294	28,071	31,155	649,841	52,969	8,648	372	(NA)	(NA)
77,986	<sup>6</sup> 23,804	41,728	38,327	496,815	63,625	7,909	293	1,429	53
23,710	(NA)	22,406	(NA)	211,654	(NA)	8,705	196	839	19
65,033	30,701	<sup>14</sup> 59,655	<sup>14</sup> 15,500	327,464	<sup>14</sup> 76,149	6,682	641	1,257	124
45,504	15,783	17,070	<sup>13</sup> 8,450	227,286	<sup>13</sup> 24,985	4,304	352	(NA)	(NA)
42,609	<sup>6</sup> 6,922	20,116	23,520	199,440	46,763	3,669	262	942	67
12,162	(NA)	3,509	(NA)	80,604	(NA)	4,525	297	435	29
<sup>10</sup> 17,521	( <sup>10</sup> )	2,263	4,502	60,092	5,539	691	245	365	146
13,385	1,021	2,062	2,698	49,563	4,648	714	199	(NA)	(NA)
13,077	769	1,520	<sup>5</sup> 247	51,663	7,632	723	192	329	87
1,934	(NA)	18	(NA)	8,412	(NA)	238	114	73	35
242,012	160,375	107,865	73,747	1,476,680	176,619	28,116	807	4,892	140
225,172	93,109	106,445	69,131	1,267,166	145,078	23,645	613	(NA)	(NA)
174,159	<sup>5</sup> <sup>6</sup> 10,280	130,828	104,617	<sup>5</sup> 1,006,491	199,102	18,755	434	3,649	85
250,203	161,690	107,876	74,096	1,523,394	177,006	28,154	762	4,892	140
<sup>11</sup> 235,115	<sup>11</sup> 93,109	106,445	<sup>13</sup> 69,326	1,315,218	<sup>13</sup> 145,273	23,715	577	(NA)	(NA)
182,462	<sup>5</sup> <sup>6</sup> 11,252	131,039	104,929	<sup>5</sup> 1,043,418	199,457	18,842	413	3,671	81
26,298	(NA)	12,936	(NA)	252,969	(NA)	7,324	185	1,125	28
<sup>11</sup> 98,539	46,781	5,229	10,489	508,719	25,314	10,925	1,061	1,757	177
78,944	29,743	10,993	7,583	431,635	15,305	7,878	625	(NA)	(NA)
58,948	5,138	30,771	25,800	350,424	64,223	2,713	187	1,240	86
7,258	(NA)	106	(NA)	98,936	(NA)	1,715	250	318	46
13,303	564	1,717	<sup>14</sup> 3,397	55,441	<sup>14</sup> 5,472	638	249	320	142
12,936	368	2,113	<sup>12</sup> 4,467	54,633	<sup>12</sup> 6,353	941	350	(NA)	(NA)
10,995	14	1,526	3,731	39,177	3,805	682	255	284	106
1,827	(NA)	54	(NA)	10,844	(NA)	201	36	66	12

TABLE 5. General Statistics by Geographic

Geographic area and year		Establishments, number		All employees		Production, development, and exploration workers			Value added in mining  (\$1,000)
		Total <sup>1</sup>	With 20 or more employees	Number	Payroll  (\$1,000)	Number	Man-hours  (1,000)	Wages  (\$1,000)	
DIVISION AND STATES—Continued									
West North Central:—Continued									
Incl. operations in manufactures—Con.									
Missouri:									
1	1963.....	496	75	8,745	42,809	6,763	13,229	31,230	80,847
2	1958.....	469	80	9,331	41,659	7,145	13,826	29,553	78,292
3	1954 <sup>7</sup> .....	485	83	8,854	34,490	7,548	15,419	27,621	<sup>5</sup> 68,571
4	1939 <sup>8</sup> .....	491	(NA)	10,861	12,666	9,320	16,529	8,968	21,036
North Dakota:									
5	1963.....	191	23	1,711	9,829	1,381	2,884	7,723	74,034
6	1958.....	172	25	1,967	10,737	1,564	3,477	8,056	40,410
7	1954 <sup>7</sup> .....	147	26	1,798	8,619	1,399	2,956	6,319	<sup>5</sup> 7,151
8	1939 <sup>8</sup> .....	108	(NA)	960	1,042	874	1,724	871	2,027
South Dakota:									
9	1963.....	141	17	2,725	14,532	2,372	5,219	12,359	27,340
10	1958.....	142	16	2,742	13,322	2,378	4,951	11,258	26,256
11	1954 <sup>7</sup> .....	191	25	3,001	12,254	2,606	5,872	10,321	<sup>5</sup> 23,333
12	1939 <sup>8</sup> .....	59	(NA)	2,922	5,542	2,647	5,988	4,690	20,689
Nebraska:									
13	1963.....	379	22	2,197	11,570	1,786	3,919	9,039	70,619
14	1958.....	317	29	2,181	9,571	1,818	3,629	7,624	65,871
15	1954 <sup>7</sup> .....	259	22	1,734	6,960	1,531	3,450	6,062	30,082
16	1939 <sup>8</sup> .....	67	(NA)	531	451	470	1,041	365	930
Kansas:									
17	1963.....	1,852	173	14,383	73,477	11,791	23,842	56,726	438,748
18	1958.....	1,632	194	16,069	74,161	12,887	25,596	54,559	384,888
19	1954 <sup>7</sup> .....	1,689	221	18,046	71,983	15,329	30,768	58,130	362,804
20	1939 <sup>8</sup> .....	956	(NA)	15,479	20,125	13,827	23,240	16,241	68,518
South Atlantic:									
Mineral industries only:									
21	1963.....	4,447	802	82,179	434,279	72,264	140,768	366,226	1,011,629
22	1958.....	4,701	899	106,066	478,296	92,417	161,799	399,482	939,989
23	1954.....	4,227	808	108,999	421,261	98,602	176,135	366,985	<sup>5</sup> 761,393
Including operations in manufactures:									
25	1963.....	4,704	837	85,411	447,223	75,283	146,685	378,035	1,045,150
26	1958.....	4,875	930	108,816	487,949	95,002	166,763	408,309	969,764
27	1954 <sup>7</sup> .....	4,380	843	111,848	429,574	101,328	181,592	374,640	<sup>5</sup> 782,793
28	1939 <sup>8</sup> .....	2,141	(NA)	141,898	173,211	134,746	211,365	157,882	243,276
Delaware, Maryland, and District of Columbia:									
29	1963.....	207	36	2,838	14,259	2,437	5,108	11,068	39,808
30	1958.....	208	31	2,542	10,632	2,195	4,191	8,386	27,510
31	1954 <sup>7</sup> .....	216	32	2,171	7,599	1,944	4,374	6,604	20,572
32	1939 <sup>8</sup> .....	180	(NA)	3,850	3,937	3,599	6,090	3,417	7,243
Virginia:									
33	1963.....	985	210	16,225	69,403	14,539	26,656	60,247	151,762
34	1958.....	1,066	204	18,600	70,371	16,240	27,460	59,154	142,571
35	1954 <sup>7</sup> .....	788	164	16,864	55,064	15,123	26,508	47,156	96,014
36	1939 <sup>8</sup> .....	257	(NA)	20,061	20,942	19,010	28,998	18,888	28,642
West Virginia:									
37	1963.....	2,715	376	47,769	277,793	42,577	80,081	239,258	599,405
38	1958.....	2,826	474	68,715	334,601	60,272	101,060	283,397	607,943
39	1954 <sup>7</sup> .....	2,339	467	75,073	308,745	68,698	115,644	274,014	515,807
40	1939 <sup>8</sup> .....	1,351	(NA)	107,260	139,827	102,302	156,344	128,978	187,547
North Carolina:									
41	1963.....	226	48	3,107	12,602	2,726	5,815	10,218	35,180
42	1958.....	267	57	4,265	13,929	3,844	7,764	11,711	31,757
43	1954 <sup>7</sup> .....	546	46	4,047	11,642	3,784	8,337	10,303	<sup>5</sup> 33,143
44	1939 <sup>8</sup> .....	111	(NA)	1,965	1,443	1,787	3,720	1,123	3,448
South Carolina:									
45	1963.....	94	26	1,763	7,270	1,571	3,531	6,097	20,544
46	1958.....	86	22	1,591	5,546	1,350	2,768	4,303	14,499
47	1954 <sup>7</sup> .....	72	19	1,518	4,356	1,372	3,102	3,591	11,229
48	1939 <sup>8</sup> .....	46	(NA)	1,388	1,064	1,291	2,756	782	2,389
Georgia:									
49	1963.....	218	77	6,978	32,328	6,105	12,995	26,624	83,932
50	1958.....	202	70	6,182	22,737	5,393	11,378	18,273	58,048
51	1954 <sup>7</sup> .....	220	58	5,286	15,742	4,782	10,490	13,016	37,326
52	1939 <sup>8</sup> .....	110	(NA)	3,906	2,808	3,674	7,440	2,279	5,864

See footnotes at end of table.

## Area: 1963 and Earlier Years—Continued

Selected expenses (\$1,000)				Value of shipments and receipts <sup>4</sup>	Capital expenditures <sup>3</sup>	Energy used <sup>3</sup> (kwh. equivalent)		Aggregate horsepower <sup>3</sup>		
Supplies, purchases for resale, and purchased fuels and electric energy <sup>2</sup>	Minerals received for preparation	Contract work <sup>3</sup>	Purchased machinery installed <sup>3</sup>			Total	Per production worker	Total	Per production worker	
				(\$1,000)	(\$1,000)	(million)	(1,000)	(1,000 hp.)		
31,346 <sup>10</sup> 26,030 18,676 6,077	1,436 ( <sup>10</sup> ) <sup>5</sup> 2,459 (NA)	9,597 3,544 2,869 259	14,287 8,881 6,160 (NA)	114,809 103,286 <sup>5</sup> 92,869 27,372	22,704 13,461 5,888 (NA)	1,298 1,312 1,260 786	192 184 167 84	602 (NA) 494 224	103 (NA) 65 24	1 2 3 4
<sup>10</sup> 16,381 <sup>10</sup> 20,247 <sup>5</sup> 6 <sup>10</sup> 9,542 471	( <sup>10</sup> ) ( <sup>10</sup> ) ( <sup>10</sup> ) (NA)	10,737 21,411 20,305 5	10,214 9,579 14,008 (NA)	93,531 65,732 <sup>5</sup> 28,694 2,503	17,835 25,915 22,312 (NA)	1,856 805 745 180	1,344 515 533 206	248 (NA) 107 15	182 (NA) 76 17	5 6 7 8
<sup>10</sup> 12,811 <sup>10</sup> 10,505 7,780 2,172	( <sup>10</sup> ) ( <sup>10</sup> ) <sup>5</sup> 592 (NA)	1,987 782 2,273 21	<sup>14</sup> 1,060 1,583 2,114 (NA)	40,178 36,544 <sup>5</sup> 32,454 22,882	<sup>14</sup> 3,040 2,582 3,562 (NA)	500 489 766 557	211 206 294 210	146 (NA) 133 46	66 (NA) 51 17	9 10 11 12
<sup>10</sup> 15,154 <sup>10</sup> 14,852 <sup>6</sup> 10 <sup>10</sup> 7,651 348	( <sup>10</sup> ) ( <sup>10</sup> ) ( <sup>10</sup> ) (NA)	9,654 11,521 8,659 73	4,555 <sup>12</sup> 5,322 8,395 (NA)	89,332 83,253 38,400 1,351	10,650 <sup>12</sup> 14,313 16,387 (NA)	1,614 1,457 692 56	904 801 452 119	256 (NA) 158 16	149 (NA) 103 34	13 14 15 16
76,001 78,525 69,605 8,145	99,577 56,074 <sup>6</sup> 2,914 (NA)	68,955 56,081 64,636 12,418	30,094 31,911 44,721 (NA)	621,384 540,135 461,400 89,081	91,991 67,344 83,280 (NA)	11,323 10,833 11,839 3,829	960 841 772 277	1,563 (NA) 1,255 440	136 (NA) 82 31	17 18 19 20
307,651 <sup>15</sup> 281,858 238,995	247,373 <sup>15</sup> 194,560 <sup>5</sup> 6 <sup>10</sup> 102,110	55,261 43,227 39,317	89,191 93,637 75,363	1,574,915 1,411,426 <sup>5</sup> 1,118,407	136,190 141,845 98,768	19,637 14,697 12,953	272 159 131	4,528 (NA) 3,274	63 (NA) 33	21 22 23
318,865 <sup>15</sup> 287,827 243,903 49,004	248,230 <sup>15</sup> 194,842 <sup>5</sup> 6 <sup>10</sup> 102,145 (NA)	55,369 43,251 39,332 2,741	89,821 <sup>13</sup> 93,996 75,549 (NA)	1,620,521 1,447,446 <sup>5</sup> 1,144,729 295,021	136,914 <sup>13</sup> 142,234 98,990 (NA)	19,681 14,740 12,994 8,876	261 155 128 66	4,528 (NA) 3,294 1,334	63 (NA) 33 10	24 25 26 27
11,386 9,827 5,554 1,405	2,322 2,504 - (NA)	2,264 1,953 736 59	<sup>12</sup> 2,959 3,328 2,195 (NA)	53,801 41,261 27,145 8,707	<sup>12</sup> 4,938 3,861 1,912 (NA)	465 347 410 388	191 158 211 108	230 (NA) 124 42	113 (NA) 64 12	28 29 30 31
43,921 42,170 37,963 5,939	32,785 29,209 10,003 (NA)	8,318 12,076 4,502 44	<sup>12</sup> 10,967 17,777 7,449 (NA)	232,753 207,408 145,592 34,625	<sup>12</sup> 14,991 36,395 10,339 (NA)	3,649 1,638 1,399 701	251 101 93 37	748 (NA) 411 146	54 (NA) 27 8	32 33 34 35
171,790 163,456 150,663 34,319	138,635 122,885 <sup>6</sup> 58,982 (NA)	37,079 22,946 26,772 2,400	47,735 51,493 46,161 (NA)	914,680 892,384 739,381 224,266	79,964 76,339 59,004 (NA)	6,818 6,922 5,885 5,662	160 115 86 55	2,063 (NA) 1,946 934	49 (NA) 28 9	36 37 38 39
<sup>11</sup> 12,941 12,554 8,962 1,082	( <sup>11</sup> ) 543 <sup>5</sup> 218 (NA)	<sup>11</sup> 1,675 611 890 7	<sup>12</sup> 4,058 3,067 3,066 (NA)	49,317 44,557 <sup>5</sup> 42,811 4,537	<sup>12</sup> 4,532 3,975 3,466 (NA)	889 737 513 176	326 192 136 98	269 (NA) 136 26	119 (NA) 36 15	40 41 42 43
<sup>11</sup> 8,632 <sup>10</sup> 6,052 3,431	( <sup>11</sup> ) ( <sup>10</sup> ) 4	<sup>11</sup> 286 160 168	<sup>12</sup> 1,585 1,480 1,298	28,477 20,341 14,184	<sup>12</sup> 2,570 1,850 1,946	484 282 288	308 209 210	169 (NA) 86	115 (NA) 63	44 45 46

TABLE 5. General Statistics by Geographic

Geographic area and year		Establishments, number		All employees <sup>1</sup>		Production, development, and exploration workers			Value added in mining  (\$1,000)
		Total <sup>1</sup>	With 20 or more employees	Number	Payroll  (\$1,000)	Number	Man-hours  (1,000)	Wages  (\$1,000)	
DIVISION AND STATES—Continued									
South Atlantic:—Continued									
Incl. operations in manufactures—Con.									
Florida:									
1	1963.....	259	64	6,731	33,568	5,328	12,499	24,523	114,519
2	1958.....	220	72	6,921	30,133	5,708	12,142	23,085	87,436
3	1954 <sup>7</sup> .....	199	57	6,889	26,426	5,625	13,137	19,956	<sup>5</sup> 68,702
4	1939 <sup>8</sup> .....	86	(NA)	3,468	3,190	3,083	6,017	2,415	8,143
East South Central:									
Mineral industries only:									
5	1963.....	3,309	563	48,829	239,683	42,869	80,663	200,999	746,996
6	1958.....	3,215	575	62,083	263,721	54,294	93,251	220,315	651,249
7	1954.....	3,073	581	66,628	240,006	60,615	104,304	206,919	<sup>5</sup> 519,642
Including operations in manufactures:									
8	1963.....	3,424	584	50,334	245,526	44,273	83,412	206,520	763,016
9	1958.....	3,311	595	63,755	269,247	55,890	96,375	225,400	671,834
10	1954 <sup>7</sup> .....	3,159	599	68,079	244,415	61,988	107,058	210,951	<sup>5</sup> 531,679
11	1939 <sup>8</sup> .....	1,423	(NA)	93,949	96,023	89,522	134,469	86,990	130,531
Kentucky:									
12	1963.....	2,091	320	27,877	132,047	25,005	45,559	115,582	339,715
13	1958.....	2,123	334	36,134	149,586	32,135	53,187	129,153	321,348
14	1954 <sup>7</sup> .....	1,828	337	38,917	139,370	35,842	59,702	124,206	270,714
15	1939 <sup>8</sup> .....	743	(NA)	53,839	56,971	51,452	73,891	52,338	77,169
Tennessee:									
16	1963.....	528	94	7,512	34,708	6,626	13,433	29,312	94,701
17	1958.....	562	106	9,692	35,585	8,411	15,571	29,411	76,001
18	1954 <sup>7</sup> .....	692	112	10,181	32,037	9,416	17,412	28,044	65,241
19	1939 <sup>8</sup> .....	266	(NA)	12,462	11,945	11,723	19,578	10,459	18,435
Alabama:									
20	1963.....	416	98	9,537	48,529	8,556	16,150	41,306	126,658
21	1958.....	357	91	12,583	57,389	11,174	18,745	47,742	138,254
22	1954 <sup>7</sup> .....	413	98	15,136	57,317	13,602	23,526	46,947	<sup>5</sup> 100,869
23	1939 <sup>8</sup> .....	341	(NA)	26,953	26,449	25,758	39,827	23,764	33,849
Mississippi:									
24	1963.....	389	72	5,378	30,242	4,086	8,270	20,320	201,942
25	1958.....	269	64	5,346	26,687	4,170	8,872	19,094	136,231
26	1954 <sup>7</sup> .....	226	52	3,845	15,691	3,128	6,418	11,754	94,855
27	1939 <sup>8</sup> .....	73	(NA)	695	658	589	1,173	429	1,078
West South Central:									
Mineral industries only:									
28	1963.....	12,127	1,745	196,365	1,271,111	135,900	287,706	768,333	7,801,797
29	1958.....	10,055	1,896	225,747	1,230,869	151,662	320,153	719,543	6,156,371
30	1954 <sup>16</sup> .....	9,179	1,906	233,679	1,044,616	165,208	358,039	688,469	<sup>5</sup> 5,209,798
Including operations in manufactures:									
31	1963.....	12,319	1,764	197,761	1,277,114	137,215	290,426	774,117	7,829,548
32	1958.....	10,219	1,918	227,204	1,236,195	153,083	322,911	724,687	6,183,853
33	1954 <sup>7</sup> 16.....	9,306	1,938	225,433	1,049,222	166,957	361,436	693,048	<sup>5</sup> 5,226,592
34	1939 <sup>8</sup> .....	6,252	(NA)	122,938	203,232	98,687	176,345	137,938	809,276
Arkansas:									
35	1963.....	452	62	4,921	24,439	4,157	8,496	19,558	113,876
36	1958.....	463	66	5,635	24,587	4,399	8,525	17,503	114,459
37	1954 <sup>7</sup> .....	423	72	6,131	22,977	5,206	10,425	17,995	<sup>5</sup> 110,107
38	1939 <sup>8</sup> .....	307	(NA)	7,477	8,734	6,926	10,737	7,446	22,150
Louisiana:									
39	1963.....	1,473	353	45,750	313,263	34,932	76,790	215,568	2,640,534
40	1958.....	1,132	344	46,161	265,027	33,293	75,470	174,668	1,528,053
41	1954 <sup>7</sup> .....	911	286	37,209	179,489	29,575	65,982	132,855	984,976
42	1939 <sup>8</sup> .....	573	(NA)	14,475	24,375	12,244	22,496	18,351	92,879
Oklahoma:									
43	1963.....	2,547	301	33,054	200,596	21,467	41,938	106,541	810,187
44	1958.....	2,668	347	38,458	196,064	24,876	48,044	105,403	676,924
45	1954 <sup>7</sup> .....	2,627	399	41,100	177,623	30,534	61,532	115,830	<sup>5</sup> 586,635
46	1939 <sup>8</sup> .....	1,687	(NA)	33,312	52,548	26,188	46,857	33,892	173,015
Texas:									
47	1963.....	7,847	1,048	114,036	738,816	76,659	163,202	432,450	4,264,951
48	1958.....	5,949	1,161	136,976	750,643	90,534	190,902	427,203	3,865,295
49	1954 <sup>7</sup> 16.....	5,345	1,181	140,993	669,133	101,642	223,497	426,368	3,544,874
50	1939 <sup>8</sup> .....	3,685	(NA)	67,674	117,575	53,329	96,255	78,249	521,232

See footnotes at end of table.

## Area: 1963 and Earlier Years—Continued

Selected expenses (\$1,000)				Value of shipments and receipts <sup>4</sup>	Capital expenditures <sup>3</sup>	Energy used <sup>3</sup> (kwh. equivalent)		Aggregate horsepower <sup>3</sup>		
Supplies, purchases for resale, and purchased fuels and electric energy <sup>2</sup>	Minerals received for preparation	Contract work <sup>3</sup>	Purchased machinery installed <sup>3</sup>			Total	Per production worker	Total	Per production worker	
				(\$1,000)	(\$1,000)	(million)	(1,000)	(1,000 hp.)		
37,187 1130,556 25,170 3,045	71,409 1138,712 532,291 (NA)	4,218 114,354 4,953 43	14,140 139,573 11,071 (NA)	221,754 158,950 5126,550 11,231	19,719 1311,681 15,636 (NA)	4,132 2,909 3,094 1,046	776 510 550 339	693 (NA) 415 117	135 (NA) 74 38	1 2 3 4
188,971 181,075 130,228	134,563 130,558 539,311	79,867 64,692 41,495	73,743 55,421 44,401	1,103,667 983,325 5706,066	120,473 99,670 69,011	13,911 12,104 9,853	325 223 163	3,015 (NA) 1,973	70 (NA) 33	5 6 7
193,762 184,937 133,168 25,930	135,010 130,748 539,502 (NA)	79,871 64,695 41,500 2,020	74,381 55,564 44,491 (NA)	1,124,847 1,007,944 5721,230 158,481	121,193 99,834 69,112 (NA)	13,929 12,128 9,867 5,742	315 217 159 64	3,015 (NA) 1,987 737	70 (NA) 32 8	8 9 10 11
86,450 88,650 67,651 13,553	105,122 75,908 624,775 (NA)	20,775 24,617 14,905 1,084	1245,293 28,063 18,756 (NA)	544,686 493,635 366,082 91,806	1252,669 44,951 30,719 (NA)	4,614 4,143 3,514 2,322	185 129 98 45	1,512 (NA) 943 332	61 (NA) 26 6	12 13 14 15
31,049 1039,212 19,594 4,160	5,081 (10) 1,236 (NA)	7,094 3,234 3,741 89	128,458 5,985 5,543 (NA)	133,201 115,754 88,267 22,684	1213,160 8,678 7,088 (NA)	2,617 1,955 1,122 1,421	395 232 119 121	455 (NA) 363 137	76 (NA) 39 12	16 17 18 19
40,660 1066,007 27,562 7,702	6,319 (10) 513,023 (NA)	11,471 8,452 3,768 301	129,126 10,381 8,920 (NA)	178,599 209,396 5145,888 41,852	1215,575 13,698 8,256 (NA)	1,464 1,499 1,261 1,815	171 134 93 70	530 (NA) 429 254	67 (NA) 32 10	20 21 22 23
35,603 30,502 61018,829 515	18,488 15,406 (10) (NA)	40,531 28,392 19,086 546	10,866 11,135 11,272 (NA)	268,361 189,159 120,993 2,139	39,069 32,507 23,049 (NA)	5,234 4,531 3,970 184	1,281 1,087 1,269 312	518 (NA) 252 14	130 (NA) 81 24	24 25 26 27
1,342,828 1,127,309 918,826	1,296,367 634,234 56149,323	1,088,397 1,067,039 1,029,501	474,426 464,944 615,825	10,197,344 7,914,441 56,397,677	1,806,471 1,535,456 1,525,548	253,160 237,107 217,257	1,863 1,563 1,315	20,187 (NA) 13,836	149 (NA) 84	28 29 30
1,349,343 1,132,188 922,678 83,045	1,296,431 634,354 56149,323 (NA)	1,088,423 1,067,075 1,029,511 122,948	474,472 464,958 615,875 (NA)	10,231,693 7,946,924 56,418,352 1,015,269	1,806,524 1,535,504 1,525,579 (NA)	253,170 237,109 217,268 106,337	1,845 1,549 1,301 1,078	20,187 (NA) 13,843 3,231	149 (NA) 83 33	31 32 33 34
27,648 1720,530 20,386 4,040	14,621 173,456 562,085 (NA)	13,438 11,094 12,855 5,158	7,911 7,816 7,139 (NA)	160,166 141,084 5138,879 31,348	17,328 16,271 13,690 (NA)	3,806 3,752 3,793 3,306	916 853 729 477	402 (NA) 359 142	101 (NA) 69 20	35 36 37 38
10921,837 338,885 610231,042 14,288	(10) 112,644 (10) (NA)	418,538 349,184 260,574 26,661	173,412 144,851 150,157 (NA)	3,417,634 1,903,526 1,195,573 133,828	736,687 570,091 431,176 (NA)	61,798 47,946 43,447 16,448	1,769 1,440 1,469 1,343	4,115 (NA) 2,354 340	118 (NA) 80 28	39 40 41 42
10253,076 17135,613 123,700 21,909	(10) 1750,538 5617,576 (NA)	127,960 126,847 155,980 13,789	58,164 60,422 94,720 (NA)	1,044,388 864,106 5758,124 208,713	204,999 186,238 220,478 (NA)	28,822 31,638 31,302 23,132	1,343 1,272 1,025 883	3,033 (NA) 2,301 1,027	142 (NA) 75 39	43 44 45 46

TABLE 5. General Statistics by Geographic

Geographic area and year		Establishments, number		All employees		Production, development, and exploration workers			Value added in mining (\$1,000)
		Total <sup>1</sup>	With 20 or more employees	Number	Payroll (\$1,000)	Number	Man-hours (1,000)	Wages (\$1,000)	
DIVISION AND STATES—Continued									
Mountain:									
Mineral industries only:									
1	1963.....	3,664	515	77,003	507,811	61,916	127,380	387,078	2,101,849
2	1958.....	3,800	565	84,891	463,056	64,682	128,705	329,590	1,744,065
3	1954.....	4,551	556	84,662	393,746	68,713	140,458	301,851	<sup>5</sup> 1,305,463
Including operations in manufactures:									
4	1963.....	3,812	522	78,098	513,397	62,992	129,532	392,581	2,129,755
5	1958.....	3,913	573	85,739	466,922	65,525	130,364	333,441	1,768,609
6	1954 <sup>7</sup> .....	4,612	561	85,066	395,178	69,114	141,253	303,275	<sup>5</sup> 1,313,850
7	1939 <sup>8</sup> .....	2,351	(NA)	74,096	111,751	66,711	129,846	93,717	283,834
Montana:									
8	1963.....	427	40	7,592	47,222	6,134	12,608	35,510	112,084
9	1958.....	453	39	8,490	44,295	5,866	11,073	28,038	116,993
10	1954 <sup>7</sup> .....	583	56	11,605	51,764	8,936	17,478	36,979	<sup>5</sup> 83,942
11	1939 <sup>8</sup> .....	499	(NA)	11,599	17,722	10,291	19,862	14,701	34,865
Idaho:									
12	1963.....	155	14	3,349	19,495	2,873	5,673	15,841	42,309
13	1958.....	183	22	3,979	21,085	3,352	6,436	16,565	38,427
14	1954 <sup>7</sup> .....	257	28	4,781	22,405	4,135	8,651	18,711	<sup>5</sup> 38,692
15	1939 <sup>8</sup> .....	116	(NA)	5,049	8,146	4,654	9,753	7,086	18,952
Wyoming:									
16	1963.....	541	101	8,760	61,052	6,657	14,185	43,925	453,779
17	1958.....	501	86	8,577	48,675	5,986	11,959	30,794	343,180
18	1954 <sup>7</sup> .....	487	101	9,745	45,847	7,491	14,641	32,508	<sup>5</sup> 258,503
19	1939 <sup>8</sup> .....	188	(NA)	6,848	10,442	6,204	10,189	8,765	32,679
Colorado:									
20	1963.....	897	84	11,374	73,638	8,565	16,549	49,167	257,310
21	1958.....	992	132	14,273	76,923	10,014	19,340	48,166	255,896
22	1954 <sup>7</sup> .....	1,043	118	13,690	59,999	10,977	21,317	44,381	<sup>5</sup> 207,541
23	1939 <sup>8</sup> .....	589	(NA)	14,800	19,823	13,469	23,356	16,845	41,875
New Mexico:									
24	1963.....	881	151	17,779	115,290	13,912	28,247	86,056	653,223
25	1958.....	770	142	17,552	97,493	13,609	28,197	70,355	534,146
26	1954 <sup>7</sup> .....	693	119	13,934	65,784	11,545	23,599	51,274	<sup>5</sup> 338,096
27	1939 <sup>8</sup> .....	286	(NA)	8,921	12,720	8,065	14,817	10,605	44,683
Arizona:									
28	1963.....	290	41	15,525	109,006	13,126	29,353	90,399	295,733
29	1958.....	338	43	15,609	81,473	12,462	25,189	63,257	195,533
30	1954 <sup>7</sup> .....	533	37	13,290	66,776	11,073	25,286	54,081	179,001
31	1939 <sup>8</sup> .....	179	(NA)	10,389	17,066	9,400	22,059	14,561	40,560
Utah:									
32	1963.....	405	72	10,832	69,538	9,238	17,589	56,400	270,662
33	1958.....	468	79	14,100	80,290	11,684	23,013	63,238	250,132
34	1954 <sup>7</sup> .....	562	59	12,685	56,807	10,298	19,903	43,447	<sup>5</sup> 153,235
35	1939 <sup>8</sup> .....	199	(NA)	10,832	16,614	9,529	18,466	13,274	51,550
Nevada:									
36	1963.....	216	19	2,887	18,156	2,487	5,328	15,283	44,655
37	1958.....	208	30	3,159	16,688	2,552	5,157	13,028	34,302
38	1954 <sup>7</sup> .....	454	43	5,336	25,796	4,659	10,378	21,894	<sup>5</sup> 54,795
39	1939 <sup>8</sup> .....	295	(NA)	5,658	9,218	5,099	11,344	7,880	18,670
Pacific:									
Mineral industries only:									
40	1963.....	2,370	330	38,398	279,044	28,877	57,805	197,092	1,353,316
41	1958.....	2,235	326	38,444	238,198	27,233	55,644	149,939	1,278,654
42	1954.....	2,962	376	45,505	233,802	34,571	69,708	163,902	<sup>5</sup> 1,365,822
Including operations in manufactures:									
43	1963.....	2,589	354	40,584	290,175	31,032	62,098	208,027	1,397,169
44	1958.....	2,411	342	39,857	245,355	28,636	58,419	157,031	1,313,199
45	1954 <sup>7</sup> .....	3,068	388	46,426	237,558	35,490	71,542	167,651	<sup>5</sup> 1,383,504
46	1939 <sup>8</sup> .....	2,354	(NA)	46,399	85,105	38,764	77,826	64,350	333,283
Washington:									
47	1963.....	294	24	2,138	13,252	1,795	3,492	10,921	29,299
48	1958.....	239	30	2,236	11,977	1,795	3,187	8,944	28,386
49	1954 <sup>7</sup> .....	311	35	3,228	14,781	2,647	4,912	11,403	<sup>5</sup> 25,182
50	1939 <sup>8</sup> .....	177	(NA)	4,248	6,203	3,894	6,608	5,376	11,075

See footnotes at end of table.

# Area: 1963 and Earlier Years—Continued

Selected expenses (\$1,000)				Value of shipments and receipts <sup>4</sup>	Capital expenditures <sup>3</sup>	Energy used <sup>3</sup> (kwh. equivalent)		Aggregate horsepower <sup>3</sup>		
Supplies, purchases for resale, and purchased fuels and electric energy <sup>2</sup>	Minerals received for preparation	Contract work <sup>3</sup>	Purchased machinery installed <sup>3</sup>			Total	Per production worker	Total	Per production worker	
				(\$1,000)	(\$1,000)	(million)	(1,000)	(1,000 hp.)		
444,505	379,982	246,092	158,552	2,895,285	435,695	50,544	816	6,198	100	1
<sup>18</sup> 436,054	<sup>18</sup> 288,382	314,987	142,611	2,445,608	480,491	46,435	718	(NA)	(NA)	2
312,916	<sup>5</sup> <sup>6</sup> 140,363	256,342	128,584	<sup>5</sup> 1,768,451	364,677	38,360	558	4,710	69	3
449,247	379,990	246,100	158,599	2,927,947	435,744	50,548	802	6,198	100	4
<sup>18</sup> 439,499	<sup>18</sup> 288,382	314,993	142,656	2,473,597	480,542	46,437	709	(NA)	(NA)	5
314,283	<sup>5</sup> <sup>6</sup> 140,363	256,353	128,606	<sup>5</sup> 1,778,236	364,679	38,361	555	4,711	68	6
64,167	(NA)	13,242	(NA)	361,243	(NA)	18,846	282	1,472	22	7
35,962	37,421	29,596	42,304	190,707	66,660	2,909	474	537	88	8
29,822	33,014	17,631	7,466	181,501	23,425	2,879	491	(NA)	(NA)	9
26,150	<sup>5</sup> <sup>6</sup> 35,711	24,074	10,554	<sup>5</sup> 148,747	31,680	2,504	280	538	60	10
9,253	(NA)	583	(NA)	44,701	(NA)	1,237	120	230	22	11
<sup>10</sup> 12,237	( <sup>10</sup> )	3,587	1,383	54,378	5,138	475	165	162	58	12
11,538	2,147	3,446	1,195	53,842	2,911	580	173	(NA)	(NA)	13
11,498	<sup>2</sup> 2,672	1,787	3,256	<sup>5</sup> 52,083	5,822	527	127	223	54	14
4,335	(NA)	102	(NA)	23,389	(NA)	233	50	83	18	15
<sup>10</sup> 107,565	( <sup>10</sup> )	49,901	26,489	561,455	76,279	10,134	1,522	969	146	16
43,941	16,423	49,707	18,715	405,882	66,084	7,161	1,196	(NA)	(NA)	17
43,751	<sup>5</sup> <sup>6</sup> 1,399	56,146	25,319	<sup>5</sup> 313,659	71,475	9,546	1,274	682	91	18
3,016	(NA)	3,176	(NA)	38,871	(NA)	1,856	299	129	21	19
52,063	31,152	23,151	12,454	340,478	35,652	5,458	637	692	83	20
67,986	37,038	36,338	31,390	369,520	59,128	6,232	622	(NA)	(NA)	21
50,243	<sup>5</sup> <sup>6</sup> 3,355	40,761	24,787	<sup>5</sup> 262,214	56,479	4,873	444	702	64	22
9,815	(NA)	601	(NA)	52,291	(NA)	2,113	157	201	15	23
119,459	134,824	84,848	<sup>12</sup> 39,159	881,121	<sup>12</sup> 150,391	22,840	1,642	1,575	114	24
120,090	89,911	139,258	47,837	707,071	224,171	19,431	1,428	(NA)	(NA)	25
67,887	<sup>5</sup> <sup>6</sup> 5,773	72,572	41,036	<sup>5</sup> 403,274	121,656	12,384	1,073	825	71	26
6,955	(NA)	7,522	(NA)	59,160	(NA)	9,234	1,145	166	21	27
85,868	25,603	17,898	<sup>12</sup> 13,078	395,579	<sup>12</sup> 42,600	3,941	300	1,182	92	28
59,168	7,973	18,412	<sup>12</sup> 6,012	257,177	<sup>12</sup> 29,921	<sup>12</sup> 4,579	367	(NA)	(NA)	29
48,748	<sup>5</sup> 1,078	30,428	9,154	<sup>5</sup> 219,031	47,867	3,747	338	889	80	30
13,540	(NA)	130	(NA)	54,230	(NA)	2,372	252	282	30	31
53,001	100,836	35,120	<sup>12</sup> 20,813	427,147	<sup>12</sup> 53,285	3,823	414	748	82	32
75,790	101,876	47,246	<sup>12</sup> 22,368	432,288	<sup>12</sup> 65,124	<sup>12</sup> 4,722	404	(NA)	(NA)	33
39,679	<sup>5</sup> 75,609	16,565	10,090	<sup>5</sup> 275,157	19,438	3,851	374	498	48	34
11,225	(NA)	262	(NA)	63,037	(NA)	1,346	141	275	29	35
<sup>10</sup> 33,246	( <sup>10</sup> )	1,999	<sup>12</sup> 2,879	77,082	<sup>12</sup> 5,697	968	389	334	143	36
<sup>10</sup> 31,172	( <sup>10</sup> )	2,949	7,644	66,318	9,749	853	334	(NA)	(NA)	37
26,327	<sup>5</sup> 14,766	14,020	4,410	<sup>5</sup> 104,071	10,262	929	199	354	76	38
6,028	(NA)	866	(NA)	25,564	(NA)	455	89	106	21	39
232,631	150,414	167,669	64,173	1,699,304	268,899	38,528	1,334	4,186	145	40
<sup>19</sup> 181,076	<sup>19</sup> 108,676	116,570	50,099	1,557,051	178,024	37,822	1,389	(NA)	(NA)	41
181,030	<sup>5</sup> <sup>6</sup> 29,371	146,476	76,296	<sup>5</sup> 1,565,884	233,161	39,874	1,153	3,910	113	42
243,546	150,615	167,673	64,216	1,754,249	268,970	38,543	1,242	4,186	145	43
<sup>19</sup> 188,282	<sup>19</sup> 108,677	116,624	50,149	1,598,856	178,075	37,829	1,321	(NA)	(NA)	44
185,065	<sup>5</sup> <sup>6</sup> 29,372	146,487	76,321	<sup>5</sup> 1,587,587	233,212	39,876	1,124	3,912	115	45
46,357	(NA)	20,782	(NA)	400,422	(NA)	29,396	758	1,484	38	46
9,505	232	2,953	2,499	40,351	4,137	368	205	178	115	47
<sup>10</sup> 10,095	( <sup>10</sup> )	1,974	1,583	39,220	2,818	481	268	(NA)	(NA)	48
8,307	<sup>5</sup> 214	1,740	2,387	<sup>5</sup> 34,998	2,857	404	153	400	151	49
2,554	(NA)	65	(NA)	13,694	(NA)	251	64	78	20	50



TABLE 5. General Statistics by Geographic

Geographic area and year	Establishments, number		All employees		Production, development, and exploration workers			Value added in mining
	Total <sup>1</sup>	With 20 or more employees	Number	Payroll (\$1,000)	Number	Man-hours (1,000)	Wages (\$1,000)	
DIVISION AND STATES—Continued								
Pacific:—Continued								
Incl. operations in manufactures—Con.								
Oregon:								
1 1963.....	231	22	2,072	11,842	1,705	3,298	9,427	21,310
2 1958.....	230	15	1,367	6,921	1,138	2,270	5,622	18,633
3 1954 <sup>2</sup> .....	296	13	1,487	6,546	1,331	2,690	5,718	13,168
4 1939 <sup>3</sup> .....	128	(NA)	1,476	1,955	1,309	2,672	1,627	3,807
California:								
5 1963.....	1,874	286	34,679	251,125	26,055	52,215	176,243	1,287,964
6 1958.....	1,758	280	34,821	216,995	24,496	50,122	135,218	1,252,079
7 1954 <sup>2</sup> .....	2,254	324	40,104	206,104	30,159	60,630	142,350	1,329,505
8 1939 <sup>3</sup> .....	2,049	(NA)	40,675	76,947	33,561	68,546	57,347	318,401
Alaska:								
9 1963.....	141	18	1,356	12,198	1,165	2,486	9,885	52,919
10 1958.....	160	9	988	7,642	816	2,047	5,725	9,214
11 1954 <sup>2</sup> .....	194	14	1,436	9,529	1,197	2,990	7,663	14,383
Hawaii:								
12 1963.....	49	4	339	1,758	312	607	1,551	5,677
13 1958.....	24	8	445	1,820	391	793	1,522	4,887
14 1954 <sup>2</sup> .....	13	2	171	598	156	320	517	1,266

Note: For explanation of column captions, see Introduction.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>For 1939, represents the number of mines and quarries, number of natural gas liquids plants, number of crude petroleum and natural gas establishments, and for mining services industries, number of operating companies.

<sup>2</sup>For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, the cost of contract work is included with the cost of supplies, purchases for resale, and purchased fuels and electric energy.

<sup>3</sup>For 1963, 1958, and 1954, excludes data for crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments. For horsepower in 1963, also excludes data for dimension stone in manufactures.

<sup>4</sup>For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, includes the estimated value of minerals produced and used in the same establishment. For 1963, 1958, and 1954, represents gross value of shipments and receipts and contains some duplication due to the transfer of crude minerals from one establishment to another for preparation. The approximate magnitude of this duplication is indicated by the figures shown for cost of minerals received for preparation. For 1939, represents net production and receipts and excludes this duplication. For 1954 and 1939, excludes the value of residue gas from natural gas liquids plants.

<sup>5</sup>Excludes data for the Uranium-Radium-Vanadium Ores Industry.

<sup>6</sup>Excludes the cost of natural gas processed at natural gas liquids plants, but includes the estimated value prior to processing of liquids contained in such gas.

<sup>7</sup>Excludes data for sand and gravel mining operations in manufacturing establishments.

<sup>8</sup>Except for value of shipments and value added excludes data for dimension stone dressing plants operated in conjunction with quarries. For the United States, the value added in dressing stone at such operations was \$7,913 thousand; this value has been included in the value of shipments and value added in mining.

## Area: 1963 and Earlier Years—Continued

Selected expenses (\$1,000)				Value of shipments and receipts <sup>4</sup>	Capital expenditures <sup>3</sup>	Energy used <sup>3</sup> (kwh. equivalent)		Aggregate horsepower <sup>3</sup>	
Supplies, purchases for resale, and purchased fuels and electric energy <sup>2</sup>	Minerals received for preparation	Contract work <sup>3</sup>	Purchased machinery installed <sup>3</sup>			Total	Per production worker	Total	Per production worker
				(\$1,000)	(\$1,000)	(million)	(1,000)	(1,000 hp.)	
7,886	276	2,350	2,502	29,907	4,417	414	243	183	116
6,173	166	3,083	1,632	23,085	6,602	345	303	(NA)	(NA)
4,681	66	1,899	2,761	18,872	3,703	349	262	141	106
1,298	(NA)	15	(NA)	5,120	(NA)	143	109	33	25
213,219	150,107	132,049	56,399	1,613,743	225,995	37,074	1,423	3,572	147
166,833	107,511	104,319	44,592	1,512,998	162,336	36,287	1,481	(NA)	(NA)
166,838	<sup>5</sup> 628,971	141,067	67,642	<sup>5</sup> 1,512,186	221,862	38,427	1,274	3,205	106
42,505	(NA)	20,702	(NA)	381,608	(NA)	29,002	864	1,373	41
11,128	-	30,144	2,496	62,786	33,901	644	553	209	185
4,453	500	7,120	1,674	17,346	5,615	652	799	(NA)	(NA)
4,890	121	1,651	3,305	19,753	4,597	677	566	151	126
1,808	-	177	320	7,462	520	43	138	44	153
1,228	-	128	668	6,207	704	64	164	(NA)	(NA)
349	-	130	226	1,778	193	19	122	15	96

<sup>9</sup>Excludes figures for Alaska and Hawaii.

<sup>10</sup>The cost of minerals received for preparation is included with the cost of supplies, purchases for resale, and purchased fuels and electric energy.

<sup>11</sup>For dimension stone operations in manufactures, the cost of minerals received for preparation and contract work is included with the cost of supplies, purchases for resale, and purchased fuels and electric energy.

<sup>12</sup>Excludes data for dimension stone operations in manufactures.

<sup>13</sup>For Middle Atlantic, excludes data for dimension stone operations in manufactures in New Jersey; for the East North Central, excludes data for dimension stone operations in manufactures in Michigan. For the West North Central, excludes data for dimension stone operations in manufactures in Iowa and Nebraska. For the South Atlantic, excludes data for dimension stone operations in manufactures in Florida.

<sup>14</sup>Figures for dimension stone establishments in manufactures in Illinois are included with those for Michigan; and for Iowa are included with those for South Dakota.

<sup>15</sup>The cost of minerals received for preparation in South Carolina and Texas are included with the cost of supplies, purchases for resale, and purchased fuels and electric energy.

<sup>16</sup>Includes data for elemental sulfur establishments which are included in the manufacturing industries for other years and are excluded from the United States totals for 1954.

<sup>17</sup>The cost of minerals received for preparation in the Metal Mining Industries is included with the cost of supplies, purchases for resale, and purchased fuels and electric energy.

<sup>18</sup>The cost of minerals received for preparation in Nevada are included with the cost of supplies, purchases for resale, and purchased fuels and electric energy.

<sup>19</sup>The cost of minerals received for preparation in the Metal Mining and Nonmetallic Mineral Mining Industries in Washington is included with the cost of supplies, purchases for resale, and purchased fuels and electric energy.

# TABLE 6. Industry Shipments and Receipts and Net Shipments of Primary Products: 1963

(In thousands of dollars)

Ind. code	Industry or subindustry	Shipments and receipts of establishments classified in the industry					Net shipments of primary products or services		
		Total	Primary products	Secondary products	Receipts for secondary services	Products purchased and resold without further processing	Total (produced or performed in all industries)	Produced or performed in this industry	Produced or performed in other industries
10	Metal mining:								
1011	Iron ores.....	762,234	(D)	(D)	1,234	(D)	706,468	(D)	(D)
1021	Copper ores.....	670,173	648,056	(D)	(D)	-	532,233	522,104	10,129
1031	Lead and zinc ores.....	135,965	125,661	9,872	229	203	110,720	109,684	1,036
	Lead ores subindustry.....	50,743	42,230	8,370	(D)	(D)	45,981	(D)	(D)
	Zinc ores subindustry.....	85,222	67,241	17,692	(D)	(D)	64,739	(D)	(D)
104	Gold and silver ores:								
1042	Lode gold.....	26,632	26,325	307	-	-	26,970	26,325	645
1043	Placer gold.....	7,532	6,791	(D)	(D)	-	6,791	6,791	-
1044	Silver ores.....	26,060	23,678	2,382	-	-	25,964	23,678	2,286
1051	Bauxite.....	21,491	(D)	(D)	-	-	20,478	20,478	-
106	Ferroalloy ores:								
1062	Manganese ores.....	7,288	(D)	(D)	(D)	-	32,776	(D)	(D)
1064	Tungsten ores.....	83,476	(D)	(D)	-	-	100,462	(D)	(D)
1069	Ferroalloy ores, n.e.c.....								
1081	Metal mining services.....	32,360	30,989	(D)	(D)	3	31,082	30,989	93
109	Miscellaneous metal ores:								
1092	Mercury ores.....	3,658	3,632	-	26	-	13,592	13,592	-
1093	Titanium ores.....	22,033	(D)	(D)	-	-	216,836	(D)	(D)
1094	Uranium-radium-vanadium ores.....	326,370	318,140	(D)	(D)	(D)	236,504	236,504	-
1099	Metallic ores, n.e.c.....	3,034	(D)	(D)	(D)	(D)	4,532	(D)	(D)
11	Anthracite mining:								
1111	Anthracite.....	220,973	219,914	(D)	(D)	432	155,899	155,899	-
1112	Anthracite mining services.....	15,538	15,538	-	-	-	15,625	15,538	87
12	Bituminous coal and lignite mining:								
1211	Bituminous coal.....	2,358,326	2,342,815	2,303	1,816	11,392	2,059,734	2,059,046	688
1212	Lignite.....	14,112	13,771	(D)	(D)	-	13,640	13,640	-
1213	Bituminous coal and lignite mining services.....	23,981	23,035	-	540	406	23,220	23,035	185
13	Oil and gas extraction:								
1311	Crude petroleum and natural gas.....	9,893,763	9,831,916	-	46,695	15,152	9,882,493	9,831,916	50,577
	Crude petroleum subindustry.....	8,600,086	7,377,201	1,170,112	42,406	10,367	7,713,747	7,377,201	336,546
	Natural gas subindustry.....	1,293,677	990,123	294,480	4,289	4,785	2,168,746	990,123	1,178,623
1321	Natural gas liquids.....	2,800,802	2,791,175	4,302	5,325	-	798,852	798,852	-
138	Oil and gas field services:								
1381	Drilling oil and gas wells.....	979,316	906,107	45,767	22,672	4,770	951,474	906,107	45,367
1382	Oil and gas exploration services.....	119,824	107,589	73	4,042	8,120	112,135	107,589	4,546
1389	Oil and gas field services, n.e.c.....	718,754	623,996	4,737	21,326	68,695	666,096	623,996	42,100
	Survey, log, cement services subindustry.....	245,323	168,355	46	27,413	49,521	205,854	168,355	37,499
	Miscellaneous oil and gas field services subindustry.....	473,419	393,163	4,691	56,391	19,174	460,242	393,163	67,079
14	Nonmetallic minerals mining:								
1411	Dimension stone.....	19,735	18,525	656	32	522	25,630	18,525	7,105
	Dimension limestone subindustry.....	3,513	3,266	16	-	231	6,275	3,266	3,009
	Dimension granite subindustry.....	9,428	8,779	416	-	233	9,815	8,779	1,036
	Dimension stone, n.e.c., subindustry.....	6,794	6,475	229	32	58	9,540	6,475	3,065
1421	Crushed and broken stone.....	794,860	748,244	28,443	8,083	10,090	3905,195	739,193	3166,002
	Crushed and broken limestone subindustry.....	542,886	510,350	18,673	6,038	7,825	3648,803	503,289	3145,514
	Crushed and broken granite subindustry.....	89,749	85,227	3,501	921	100	386,103	85,140	3963
	Crushed and broken stone, n.e.c., subindustry.....	162,225	151,106	7,830	1,124	2,165	3170,289	149,203	321,086
1441	Sand and gravel.....	678,068	650,025	16,745	3,617	7,681	3731,104	646,204	384,900
	Construction sand and gravel subindustry.....	607,539	578,059	18,490	3,617	7,373	3660,953	574,978	385,975
	Glass sand subindustry.....	29,099	21,180	7,705	-	214	27,078	21,048	6,030
	Molding sand subindustry.....	16,642	14,052	2,564	-	26	20,687	13,751	6,936
	Industrial sand, n.e.c., subindustry.....	24,788	15,274	9,446	-	68	22,386	14,967	7,419
145	Clay and related minerals:								
1452	Bentonite.....	18,105	16,908	(D)	-	(D)	(D)	417,217	(D)
1453	Fire clay.....	17,105	16,358	(D)	(D)	138	340,489	16,289	324,200
1454	Fuller's earth.....	12,954	10,094	(D)	-	(D)	10,094	10,094	-
1455	Kaolin and ball clay.....	66,077	65,157	(D)	-	(D)	67,286	(D)	(D)
1456	Feldspar.....	8,459	7,654	805	-	-	8,203	7,624	579
1459	Clay and related minerals, n.e.c.....	38,944	37,505	1,252	(D)	(D)	375,356	37,481	337,875

See footnotes at end of table.

**TABLE 6. Industry Shipments and Receipts and Net Shipments of Primary Products: 1963—Continued**

(In thousands of dollars)

Ind. code	Industry or subindustry	Shipments and receipts of establishments classified in the industry					Net shipments of primary products or services		
		Total	Primary products	Secondary products	Receipts for secondary services	Products purchased and resold without further processing	Total (produced or performed in all industries)	Produced or performed in this industry	Produced or performed in other industries
	Nonmetallic Minerals Mining—Continued								
147	Chemical and fertilizer minerals:								
1472	Barite.....	16,668	(D)	(D)	(D)	(D)	32,034	16,392	15,642
1473	Fluorspar.....	15,792	13,340	2,090	249	113	10,038	10,001	37
1474	Potash, soda, and borate minerals.....	192,116	(D)	(D)	-	(D)	186,524	186,524	-
1475	Phosphate rock.....	161,658	161,658	-	-	-	130,295	130,295	-
1476	Rock salt.....	59,297	54,798	(D)	-	(D)	58,207	(D)	(D)
1477	Sulfur.....	113,103	113,091	12	-	-	113,091	113,091	-
1479	Chemical-fertilizer mining, n.e.c.....	18,270	11,213	(D)	-	(D)	13,229	10,689	2,540
1481	Nonmetallic minerals services.....	13,246	12,751	-	493	2	13,134	12,751	383
149	Miscellaneous minerals, n.e.c.....	102,446	100,869	1,404	133	40	134,937	100,314	34,623
1492	Gypsum.....	10,160	9,629	(D)	(D)	-	<sup>3</sup> 38,345	9,629	<sup>3</sup> 28,716
1493	Mica.....	5,560	(D)	(D)	9	11	8,885	4,993	<sup>5</sup> 3,892
1494	Native asphalt and bitumens.....	8,509	(D)	(D)	-	(D)	8,799	(D)	(D)
1495	Pumice and pumicite.....	5,358	(D)	(D)	-	20	5,460	(D)	(D)
1496	Talc, soapstone, and pyrophyllite.....	17,534	16,857	566	111	-	16,833	16,595	238
1497	Natural abrasives, except sand.....	5,002	5,001	-	-	1	5,001	5,001	-
1498	Peat.....	7,360	(D)	-	(D)	-	7,374	(D)	(D)
1499	Nonmetallic minerals, n.e.c.....	42,963	42,955	(D)	(D)	(D)	44,240	(D)	(D)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available.

(X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Represents gross shipments of mercury metal.

<sup>2</sup>Represents gross shipments of titanium concentrates.

<sup>3</sup>Includes the estimated value of minerals produced and used in the same manufacturing establishment in making manufactured products.

<sup>4</sup>Includes bentonite produced in other industries, amounting to less than two percent of the total shown.

<sup>5</sup>Represents gross shipments from other industries, principally material processed in the manufacturing industries.

TABLE 7. 1963 Bureau of the Census and Bureau of Mines Statistics Compared

Product	Unit of measure	Bureau of the Census statistics			Bureau of Mines statistics		
		Production	Shipments, including interplant transfers		Production <sup>1</sup>	Shipments <sup>1</sup>	
			Quantity	Value (\$1,000)		Quantity	Value (\$1,000)
<u>METAL ORES AND CONCENTRATES</u>							
Iron ore, except manganiferous iron ore:							
Crude iron ore.....	1,000 long tons...	<sup>2</sup> 152,504	<sup>2</sup> 41,058	134,300	152,776	(NA)	(NA)
Net production and shipments.....	...do.....	<sup>2</sup> 73,778	<sup>3</sup> 74,119	<sup>3</sup> 703,715	72,841	73,564	678,181
Manganiferous iron ore:							
Net production and shipments.....	...do.....	( <sup>2</sup> )	418	2,753	(NA)	<sup>4</sup> 500	(NA)
Copper, lead, zinc, gold, and silver ores:							
Production and net shipments.....	1,000 short tons..	<sup>2</sup> 162,896	4,200	20,321	165,944	(NA)	(NA)
Metal content of copper, lead, zinc, gold, and silver-bearing materials: <sup>6</sup>							
Copper.....	1,000 pounds.....	2,441,016	(NA)	(NA)	2,426,332	(NA)	<sup>7</sup> 747,310
Lead.....	...do.....	522,146	(NA)	(NA)	506,738	(NA)	<sup>7</sup> 54,727
Zinc.....	...do.....	1,179,680	(NA)	(NA)	1,058,508	(NA)	<sup>7</sup> 122,533
Gold.....	1,000 fine ounces.	1,437	(NA)	(NA)	1,454	(NA)	<sup>7</sup> 50,889
Silver.....	...do.....	34,583	(NA)	(NA)	35,243	(NA)	<sup>7</sup> 45,076
Copper ores:							
Crude ore mined in the Copper Ores Industry (production and net shipments).....	Production: 1,000 short tons of ores or concentrates	145,312	copper- 2,170,200	{ 13,307 468,311	<sup>8</sup> 146,450 2,041,192	copper- <sup>8</sup> 2,178,499	{ (NA) (NA)
Copper concentrates.....		4,257					
Copper precipitates (metal content).....		(NA)	251,018	50,615	(NA)	195,946	(NA)
Lead and zinc ores:							
Crude ore mined in the Lead and Zinc Ores Industry (production and net shipments).....	Shipments: 1,000 pounds of metal contained..	14,154	lead - 464,445 zinc- 1,173,693	{ 5,353 43,259 62,108	<sup>9</sup> 16,225 (NA)	lead - <sup>9</sup> 487,176 zinc - <sup>9</sup> 1,002,212	{ (NA) (NA) (NA)
Lead concentrates.....		329					
Zinc concentrates.....		882					
Lode gold:							
Crude ore mined in the Lode Gold Industry (production and net shipments).....	Production: 1,000 short tons of ores or concentrates.	2,514	gold- 101.5	{ 315 3,722	<sup>10</sup> 2,682 (NA)	gold- <sup>11</sup> 87.7	{ (NA) (NA)
Gold concentrates.....		30					
Mill bullion.....	Shipments: 1,000 fine ounces of metal contained	(NA)	652.9	22,933	(NA)	<sup>12</sup> 655.5	(NA)
Placer gold.....	1,000 fine ounces.	193.7	193.7	6,791	185	(NA)	<sup>7</sup> 6,452
Silver ores:							
Crude ore mined in the Silver Ores Industry (production and net shipments).....	Production: 1,000 short tons of ores or concentrates.	916	silver- 16,211	{ 1,346 24,598	<sup>13</sup> 587 (NA)	silver- <sup>15</sup> 11,050	{ (NA) (NA)
Silver concentrates and mill bullion.....		<sup>14</sup> 64					
Bauxite:							
Crude bauxite.....	1,000 long tons...	1,863	(D)	(D)	1,831	(NA)	(NA)
Net shipments.....	...do.....	(X)	<sup>16</sup> 1,789	<sup>16</sup> 20,478	(X)	1,779	18,290
Manganese ores.....	...do.....	<sup>17</sup> 55	1889	<sup>18</sup> 6,752	(NA)	<sup>19</sup> 48	(NA)
Mercury ores:							
Crude mercury ores.....	1,000 short tons..	119	(D)	(D)	<sup>20</sup> 114	(NA)	(NA)
Mercury metal.....	Flasks (76 pounds)	19,188	18,838	3,613	19,117	(NA)	<sup>21</sup> 3,623
Titanium ores:							
Crude titanium ores.....	1,000 short tons..	25,720	-	-	(NA)	(NA)	(NA)
Titanium concentrates.....	...do.....	901	902	16,836	900	901	17,791
Uranium-radium-vanadium ores:							
Crude uranium-vanadium ores.....	...do.....	6,383	2,806	<sup>77</sup> 048	<sup>22</sup> 5,646	(NA)	<sup>22</sup> 115,821
Uranium-vanadium concentrates.....	...do.....	<sup>23</sup> 110	<sup>23</sup> 107	<sup>23</sup> 241,092	<sup>24</sup> 18	(NA)	<sup>24</sup> 238,788
Zirconium concentrates.....	Short tons.....	78,279	78,810	3,465	(NA)	(NA)	5,742
Antimony, beryllium, germanium, bastnaesite, monazite, and thorium concentrates and platinum group metals.....		(X)	(X)	1,694	(X)	(X)	
<u>COAL</u>							
Anthracite:							
Net production and shipments.....	1,000 short tons..	18,388	{ <sup>16</sup> 18,638 <sup>25</sup> 18,353	{ <sup>16</sup> 155,995 <sup>25</sup> 155,899	18,267	18,106	153,013

**TABLE 7. 1963 Bureau of the Census and Bureau of Mines Statistics  
Compared—Continued**

Product	Unit of measure	Bureau of the Census statistics			Bureau of Mines statistics		
		Production	Shipments, including interplant transfers		Production <sup>1</sup>	Shipments <sup>1</sup>	
			Quantity	Value		Quantity	Value
		(Quantity)		(\$1,000)	(Quantity)		(\$1,000)
<u>OIL AND GAS</u>							
Crude petroleum, including field condensate and drips.....	1,000 barrels.....	<sup>26</sup> 2,703,520	2,701,978	7,713,747	2,752,723	(NA)	<sup>217</sup> 9,965,743
Natural gas.....	Million cu. ft....	15,956,981	13,840,467	2,168,746	16,973,368	<sup>27</sup> 14,746,663	<sup>272</sup> 3,328,030
Natural gas liquids:							
Net production and net shipments.....	1,000 barrels.....	398,892	398,272	798,852	400,886	398,363	<sup>21</sup> 798,943
<u>NONMETALLIC MINERALS, EXCEPT FUELS<sup>1</sup></u>							
Dimension stone, total.....	1,000 short tons..	(NA)	3,484	91,649	(NA)	2,616	96,318
Rough (net).....	..do.....	(NA)	2,227	22,142	(NA)	<sup>28</sup> 1,377	<sup>28</sup> 20,159
Dressed.....	..do.....	(NA)	1,257	69,507	(NA)	<sup>28</sup> 1,239	<sup>28</sup> 76,159
Limestone, total.....	..do.....	(NA)	1,531	19,890	(NA)	895	18,134
Rough (net).....	..do.....	(NA)	1,075	5,906	(NA)	530	4,484
Dressed.....	..do.....	(NA)	456	13,984	(NA)	365	13,650
Granite, total.....	..do.....	(NA)	923	35,636	(NA)	753	32,796
Rough (net).....	..do.....	(NA)	489	8,239	(NA)	461	10,858
Dressed.....	..do.....	(NA)	434	27,397	(NA)	292	21,938
Stone, n.e.c., total.....	..do.....	(NA)	1,030	36,123	(NA)	968	<sup>45</sup> 3,388
Rough (net).....	..do.....	(NA)	663	7,997	(NA)	<sup>28</sup> 386	<sup>28</sup> 4,817
Dressed.....	..do.....	(NA)	367	28,126	(NA)	<sup>28</sup> 582	<sup>28</sup> 40,571
Crushed and broken stone (net), total.....	..do.....	(NA)	(NA)	(NA)	(NA)	685,750	971,790
Excluding Federal, State, and local government operations.....	..do.....	<sup>29</sup> 603,693	504,363	791,009	(NA)	(NA)	(NA)
Commercial.....	..do.....	(NA)	(NA)	(NA)	(NA)	618,424	892,479
Government and contractor.....	..do.....	(NA)	(NA)	(NA)	(NA)	67,326	<sup>79</sup> 3,111
Limestone <sup>30</sup> .....	..do.....	<sup>29</sup> 471,375	376,256	536,996	(NA)	488,348	661,926
Granite <sup>30</sup> .....	..do.....	<sup>29</sup> 49,629	49,213	86,103	(NA)	48,040	70,837
Stone, n.e.c. <sup>30</sup> .....	..do.....	<sup>29</sup> 82,689	78,894	167,910	(NA)	149,362	239,027
Construction sand, total.....	..do.....	(NA)	(NA)	(NA)	(NA)	292,879	269,934
Excluding Federal, State, and local government operations.....	..do.....	271,569	263,316	265,168	(NA)	(NA)	(NA)
Commercial.....	..do.....	(NA)	(NA)	(NA)	(NA)	250,357	241,420
Government and contractor.....	..do.....	(NA)	(NA)	(NA)	(NA)	42,522	28,514
Glass sand.....	..do.....	8,109	8,097	27,210	(NA)	7,309	24,341
Molding sand.....	..do.....	7,755	7,757	20,988	(NA)	7,579	20,814
Industrial sand, n.e.c.....	..do.....	5,520	5,528	22,693	(NA)	6,211	23,411
Gravel, total.....	..do.....	(NA)	(NA)	(NA)	(NA)	507,872	508,772
Excluding Federal, State, and local government operations.....	..do.....	334,675	324,945	364,058	(NA)	(NA)	(NA)
Commercial.....	..do.....	(NA)	(NA)	(NA)	(NA)	319,215	350,010
Government and contractor.....	..do.....	(NA)	(NA)	(NA)	(NA)	188,657	158,762
Bentonite:							
Crude bentonite.....	..do.....	<sup>31</sup> 2,115	<sup>16</sup> 241	<sup>16</sup> 1,207	(NA)	(NA)	(NA)
Net shipments by the mineral industries.....	..do.....	(X)	1,645	17,217	1,585	(NA)	18,536
Fire clay:							
Crude fire clay.....	..do.....	<sup>32</sup> 8,430	3,178	13,684	} 8,390	(NA)	39,558
Prepared fire clay.....	..do.....	(NA)	1,069	5,817			
Fuller's earth:							
Net shipments.....	..do.....	(X)	462	10,094	482	(NA)	11,211
Kaolin and ball clay:							
Crude kaolin and ball clay.....	..do.....	<sup>31</sup> 5,254	<sup>16</sup> 331	<sup>16</sup> 2,373	} 3,712	(NA)	67,311
Prepared kaolin and ball clay.....	..do.....	(NA)	3,269	64,913			
Feldspar:							
Crude feldspar.....	..do.....	1,052	25	130	615	(NA)	5,524
Prepared feldspar.....	..do.....	(NA)	593	8,130	(NA)	599	7,353
Common clay and shale:							
Crude common clay and shale.....	..do.....	<sup>32</sup> 37,101	2,329	3,650	} 35,968	(NA)	44,194
Prepared common clay and shale.....	..do.....	(NA)	4,661	26,632			

**TABLE 7. 1963 Bureau of the Census and Bureau of Mines Statistics  
Compared—Continued**

Product	Unit of measure	Bureau of the Census statistics			Bureau of Mines statistics			
		Production	Shipments, including interplant transfers		Production <sup>1</sup>	Shipments <sup>1</sup>		
			Quantity	Value (\$1,000)		Quantity	Value (\$1,000)	
<u>NONMETALLIC MINERALS, EXCEPT FUELS<sup>1</sup>—Continued</u>								
Fluorspar:								
Production and shipments:								
Crude fluorspar.....	..do.....	595	116	906	586	(NA)	(NA)	
Prepared fluorspar.....	..do.....	35,296	35,293	35,12,471	188	(NA)	(NA)	
Net shipments.....	..do.....	(X)	(36)	10,038	(X)	37,200	379,001	
Crude fluorspar prepared.....	..do.....	35,716	(NA)	(NA)	586	(NA)	(NA)	
Potash, soda, and borate minerals:								
Potassium salts:								
Crude salts.....	1,000 short tons..	16,714	384,608	38,104,209	16,414	(NA)	(NA)	
Processed or refined salts.....	..do.....	4,515			394,871	(NA)	21,109,276	
Sodium carbonates.....	..do.....	(NA)	1,107	26,595	(NA)	1,119	27,616	
Sodium sulfates.....	..do.....	(NA)	432	8,778	(NA)	235	8,392	
Boron compounds.....	..do.....	(NA)	16,723	164,694	(NA)	700	54,981	
Phosphate rock:								
Crude ore or matrix.....	1,000 long tons..	63,403	3,703	10,897	61,598	(NA)	(NA)	
Washed or concentrated.....	..do.....	18,006	10,218	43,396	16,794	(NA)	(NA)	
Dried, calcined, or sintered.....	..do.....	16,936	16,948	107,365	15,164	(NA)	(NA)	
Net shipments.....	..do.....	(X)	{	1622,044	{	(X)	19,860	140,642
				4020,843				
Rock salt.....	1,000 short tons..	(NA)	168,769	168,207	(NA)	8,345	51,648	
Native sulfur and sulfur ore.....	1,000 long tons..	4,883	4,923	113,091	4,883	374,996	3799,029	
Frasch process sulfur.....	..do.....	4,882	4,922	113,076	4,882	374,995	3799,014	
Sulfur ore.....	..do.....	1	1	15	1	371	3715	
Gypsum:								
Crude.....	1,000 short tons..	4110,176	339	1,094	10,388	(NA)	2138,138	
Prepared (crushed, ground, screened, or dried)...	..do.....	(NA)	4,736	19,757	(NA)	(NA)	(NA)	
Mica:								
Hand cobbled and sheet mica.....	1,000 lbs.....	108	108	16	103	(NA)	13	
Scrap (or flake) mica.....	1,000 short tons..	113	42	1,320	109	(NA)	2,776	
Ground mica.....	..do.....	(NA)	124	7,549	117	(NA)	6,805	
Native asphalt and bitumens:								
Gilsonite.....	..do.....	(D)	(D)	8,799	1,633	(NA)	218,383	
Bituminous limestone and sandstone.....	..do.....	1,314	1,317					
Pumice and pumicite.....	..do.....	2,308	2,294	5,460	422,618	(NA)	426,578	
Talc, soapstone, and pyrophyllite:								
Crude.....	..do.....	873	16,219	161,946	43804	(NA)	435,505	
Prepared.....	..do.....	(NA)	795	18,694	43730	(NA)	4318,110	
Natural abrasives, except sand.....	..do.....	84	83	5,001	91	(NA)	2,052	
Peat.....	..do.....	566	549	7,374	44579	(NA)	445,423	
Asbestos, crude and prepared.....	..do.....	68	64	5,490	4466	(NA)	445,425	
Diatomite, prepared.....	..do.....	45554	45554	4527,952	46482	(NA)	4624,149	
Perlite.....	..do.....	385	47343	474,652	325	(NA)	2,727	
Other nonmetallic minerals.....	..do.....	412	16391	166,146	(NA)	(NA)	4823,364	

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing data for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>For nonmetallic minerals (except fuels), unless otherwise noted, figures represent minerals "sold or used by producers".

<sup>2</sup>Manganiferous iron ore is included with "iron ore, except manganiferous iron ore."

<sup>3</sup>Represents direct-shipping ore, treated ores to consumers, and agglomerates.

<sup>4</sup>Represents manganiferous iron ore and for Minnesota ferruginous manganese ore.

<sup>5</sup>Represents only ores mined in the Copper Ores, Lead and Zinc Ores, Lode Gold, and Silver Ores Industries.

<sup>6</sup>Census quantity figures represent gross metal content; Bureau of Mines quantity figures represent recoverable metal content of mine production. <sup>7</sup>Estimated by the Bureau of Mines from the quantity of mine production and an average price. For copper, lead, and zinc, represents the weighted average unit price of domestic refined metals delivered to purchasers. For gold, represents the price under authority of the Gold Reserve Act of January 31, 1944. For silver, represents the Treasury buying price for newly mined silver.

<sup>8</sup>Represents copper ore sold or treated.

<sup>9</sup>Represents lead ore; zinc ore; lead-zinc ore; and copper-lead, copper-zinc, and copper-lead-zinc ores.

<sup>10</sup>Represents gold ore and gold-silver ore produced.

<sup>11</sup>Represents metal contained in gold ore and gold-silver ore produced less mill bullion produced.

<sup>12</sup>Represents production.

<sup>13</sup>Represents silver ore produced.

<sup>14</sup>Represents concentrates only.

<sup>15</sup>Represents metal contained in silver ore.

**TABLE 7. 1963 Bureau of the Census and Bureau of Mines Statistics  
Compared—Continued**

Footnotes for Table 7--Continued

- <sup>16</sup>Represents gross shipments less receipts from other establishments for preparation or treatment.
- <sup>17</sup>Represents crude ores.
- <sup>18</sup>Represents treated manganese ores, nodules, and sinter produced at domestic treatment plants whether from domestic or foreign ores.
- <sup>19</sup>Represents manganese ore (35 percent or more manganese) and ferruginous manganese ore, except in Minnesota. These shipments represent marketable ores for the consumer. Besides direct-shipping ore, they include without duplication concentrates and nodules made from domestic ores.
- <sup>20</sup>Represents mercury ores treated.
- <sup>21</sup>Represents value of production.
- <sup>22</sup>Represents uranium ore. The value figure represents the value of such ore at the mine.
- <sup>23</sup>Includes lignite ash valued for its uranium content, slurry, and low-grade concentrates shipped to mills for further upgrading.
- <sup>24</sup>Represents 14 thousand tons of U<sub>3</sub>O<sub>8</sub> contained in uranium concentrates valued at \$225,000 thousand and 4 thousand tons of vanadium contained in vanadium concentrates valued at \$13,788 thousand.
- <sup>25</sup>Represents raw coal shipped for use without preparation plus prepared coal.
- <sup>26</sup>Represents crude petroleum shipped plus crude petroleum produced and used at the same establishment in lease operations.
- <sup>27</sup>Represents marketed production, "comprising gas sold or consumed by producers, including losses in transmission, amounts added to storage, and increases in gas in pipe lines." Census figures show 551,102 million cubic feet of gas produced and used in the same establishment in lease operations and net increase in underground storage of 5,201 million cubic feet; these figures are not included in the Census shipments figures shown.
- <sup>28</sup>Figures for rough monumental marble are included with those for dressed monumental marble.
- <sup>29</sup>Represents stone shipments plus stone mined and used in the same establishment in making cement, lime, and other manufactured products.
- <sup>30</sup>Census figures exclude operations by Federal, State, and local governments. Bureau of Mines figures represent totals for all stone sold or used by commercial, government, and contractor operations.
- <sup>31</sup>Represents quantity mined and prepared at same establishment plus quantity of crude net shipments.
- <sup>32</sup>Represents quantity mined and used at the same establishment in making cement, clay products, and prepared clay plus quantity of crude clay shipped.
- <sup>33</sup>Represents mine or plant output of primary barite.
- <sup>34</sup>Represents crushed and ground barite sold by producers.
- <sup>35</sup>Includes foreign ores prepared in the United States.
- <sup>36</sup>Not shown, since a significant tonnage cannot be computed by the only method available: subtraction of minerals received for preparation from the gross tonnage shipped, with both of these tonnages including large quantities of foreign ores.
- <sup>37</sup>Represents shipments.
- <sup>38</sup>Represents net shipments obtained from gross shipments of crude and processed or refined salts by subtracting shipments of crude salts to other establishments for processing or refining.
- <sup>39</sup>Represents production of marketable potassium salts and probably includes some marketable crude salts.
- <sup>40</sup>Represents shipments of crude ore or matrix, except to washer or concentrator; washed or concentrated rock, except to drier; and dried, calcined, or sintered rock.
- <sup>41</sup>In addition to gypsum mined for shipment in crude or prepared form, includes 5,901 tons of gypsum valued at approximately \$24,009 thousand, produced and used in the same establishment in the manufacture of calcined gypsum products.
- <sup>42</sup>Includes volcanic cinder.
- <sup>43</sup>Excludes dimension soapstone.
- <sup>44</sup>Represents sales.
- <sup>45</sup>Includes crude diatomite produced for shipment without preparation, amounting to less than one percent of the total.
- <sup>46</sup>Represents average annual production, 1960-1962.
- <sup>47</sup>Includes some expanded perlite produced in conjunction with mining.
- <sup>48</sup>Represents gem stones, vermiculite, graphite, greensand marl, staurolite, and other items not elsewhere classified.





# Size of Establishments

## Chapter 2

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Chart 1

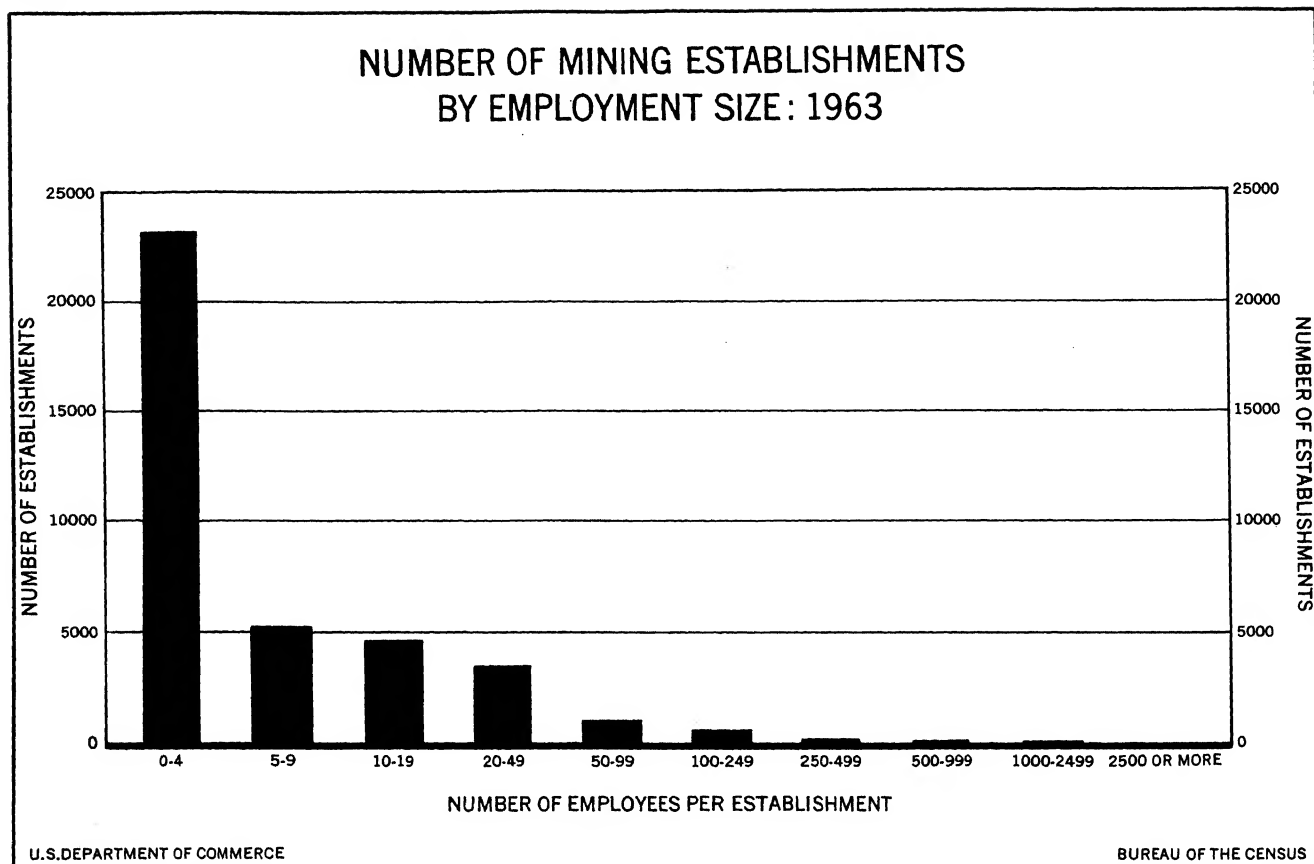
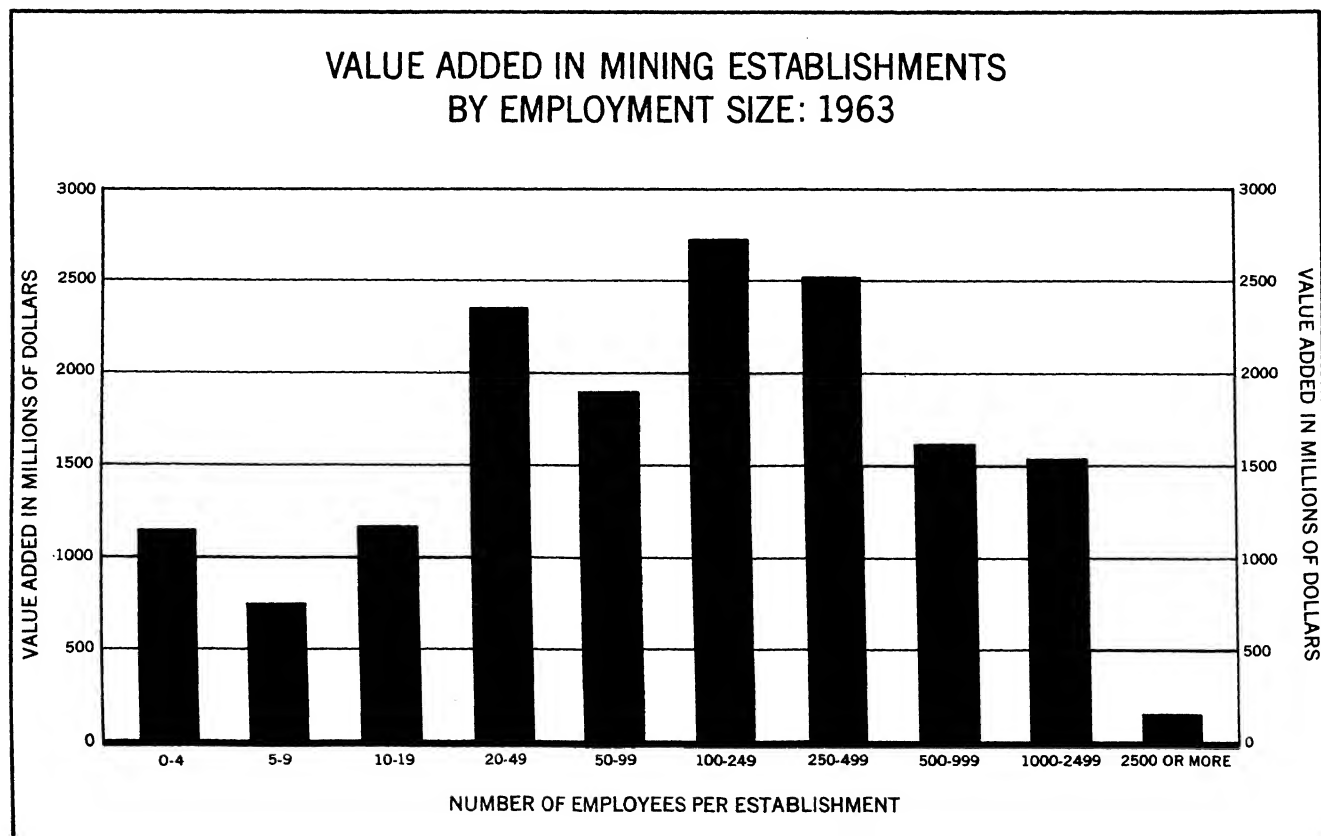


Chart 2



**TABLE 1. Number of Mineral Operations, Classified by Employment Size, by Industry Groups and Industries: 1963 and 1958**

Ind. code	Industry group and industry	All operations, total	Operations with an average of--										
			No employees	1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
	All mineral operations:												
	1963.....	40,532	7,968	16,345	5,612	4,864	3,665	1,120	640	228	63	24	3
	1958 <sup>1</sup> .....	37,784	4,222	16,273	5,831	5,180	3,881	1,227	755	255	108	46	6
	Mineral industries:												
	1963.....	38,651	7,889	15,328	5,314	4,621	3,499	1,077	612	222	62	24	3
	1958 <sup>1</sup> .....	36,218	4,127	15,466	5,592	5,005	3,710	1,177	734	250	106	45	6
	Included in manufactures:												
	1963.....	1,881	79	1,017	298	243	166	43	28	6	1	-	-
	1958.....	1,566	95	807	239	175	171	50	21	5	2	1	-
	INDUSTRIES: 1963												
10	Metal mining.....	1,614	492	558	451	115	89	60	72	46	17	13	1
1011	Iron ores.....	208	23	34	22	28	25	20	32	16	5	3	-
1021	Copper ores.....	160	45	47	17	10	6	3	5	11	8	7	1
1031	Lead and zinc ores.....	205	49	72	17	21	16	6	12	9	2	1	-
	Lead ores subindustry.....	125	41	55	8	8	4	1	5	1	1	1	-
	Zinc ores subindustry.....	80	8	17	9	13	12	5	7	8	1	-	-
104	Gold and silver ores.....	466	236	174	27	14	4	4	5	1	-	1	-
1042	Lode gold.....	201	82	94	15	5	2	1	1	-	-	1	-
1043	Placer gold.....	158	103	44	6	3	-	1	1	-	-	-	-
1044	Silver ores.....	107	51	36	6	6	2	2	3	1	-	-	-
1051	Bauxite.....	17	3	3	3	4	2	-	1	1	-	-	-
106	Ferroalloy ores.....	58	16	20	6	5	4	4	1	1	-	1	-
1062	Manganese ores.....	17	2	6	2	2	4	1	-	-	-	-	-
1064	Tungsten ores.....	41	14	14	4	3	-	3	1	1	-	1	-
1069	Ferroalloy ores, n.e.c.....	41	14	14	4	3	-	3	1	1	-	1	-
1081	Metal mining services.....	83	4	45	13	4	10	2	2	3	-	-	-
109	Miscellaneous metal ores.....	417	116	163	46	29	22	21	14	4	2	-	-
1092	Mercury ores.....	49	22	18	5	1	1	1	1	-	-	-	-
1093	Titanium ores.....	8	1	-	-	-	2	-	4	1	-	-	-
1094	Uranium-radium-vanadium ores...	335	83	135	41	25	18	19	9	3	2	-	-
1099	Metallic ores, n.e.c.....	25	10	10	-	3	1	1	-	-	-	-	-
11	Anthracite mining.....	1,069	509	223	127	108	62	27	7	5	-	1	-
1111	Anthracite.....	1,026	507	216	119	99	53	20	6	5	-	1	-
1112	Anthracite mining services.....	43	2	7	8	9	9	7	1	-	-	-	-
12	Bituminous coal and lignite mining.	6,305	853	2,220	1,107	959	665	209	191	87	13	1	-
1211	Bituminous coal.....	6,115	833	2,141	1,070	928	649	202	191	87	13	1	-
1212	Lignite.....	59	15	27	6	5	3	3	-	-	-	-	-
1213	Bituminous coal and lignite mining services.....	131	5	52	31	26	13	4	-	-	-	-	-
13	Oil and gas extraction.....	21,242	4,937	9,336	2,529	1,993	1,598	513	243	61	21	9	2
1311	Crude petroleum and natural gas..	14,378	4,323	6,865	1,418	818	570	204	120	41	13	6	-
	Crude petroleum subindustry....	12,326	3,626	5,947	1,258	706	468	171	96	39	9	6	-
	Natural gas subindustry.....	2,052	697	918	160	112	102	33	24	2	4	-	-
1321	Natural gas liquids.....	652	12	105	115	175	192	44	9	-	-	-	-
138	Oil and gas field services.....	6,212	602	2,366	996	1,000	836	265	114	20	8	3	2
1381	Drilling oil and gas wells.....	2,836	277	891	431	491	483	177	72	11	3	-	-
1382	Oil and gas exploration services.....	373	59	166	35	45	33	13	16	4	2	-	-
1389	Oil and gas field services, n.e.c.....	3,003	266	1,309	530	464	320	75	26	5	3	3	2
14	Nonmetallic minerals mining.....	10,302	1,177	4,008	1,698	1,689	1,251	311	127	29	12	-	-
	Mineral industries.....	8,421	1,098	2,991	1,400	1,446	1,085	268	99	23	11	-	-
	Included in manufactures.....	1,881	79	1,017	298	243	166	43	28	6	1	-	-
1411	Dimension stone.....	551	52	232	83	77	58	23	19	6	1	-	-
	Mineral industry.....	319	52	148	51	43	22	2	1	-	-	-	-
	Included in manufactures.....	232	-	84	32	34	36	21	18	6	1	-	-
	Dimension limestone (mineral subindustry).....	61	16	25	9	6	5	-	-	-	-	-	-
	Dimension granite (mineral subindustry).....	66	5	19	18	14	7	2	1	-	-	-	-
	Dimension stone, n.e.c. (mineral subindustry).....	192	31	104	24	23	10	-	-	-	-	-	-

See footnotes at end of table.

**TABLE 1. Number of Mineral Operations, Classified by Employment Size, by Industry Groups and Industries: 1963 and 1958—Continued**

Ind. code	Industry group and industry	All operations, total	Operations with an average of—										
			No employees	1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
14	Nonmetallic minerals mining--Con.												
1421	Crushed and broken stone.....	2,586	197	598	376	648	581	138	42	5	1	-	-
	Mineral industry.....	2,256	188	509	317	574	500	127	35	5	1	-	-
	Included in manufactures.....	330	9	89	59	74	81	11	7	-	-	-	-
	Crushed and broken limestone (mineral subindustry).....	1,612	124	325	229	443	373	92	21	4	1	-	-
	Crushed and broken granite (mineral subindustry).....	150	14	30	13	28	42	18	4	1	-	-	-
	Crushed and broken stone, n.e.c. (mineral subindustry)...	494	50	154	75	103	85	17	10	-	-	-	-
	Sand and gravel.....	5,241	717	2,272	972	746	435	77	20	2	-	-	-
1441	Mineral industry.....	4,616	667	1,887	872	678	419	73	18	2	-	-	-
	Included in manufactures.....	625	50	385	100	68	16	4	2	-	-	-	-
	Construction sand and gravel.....	5,044	702	2,211	943	704	399	67	18	-	-	-	-
	Mineral subindustry.....	4,419	652	1,826	843	636	383	63	16	-	-	-	-
	Included in manufactures.....	625	50	385	100	68	16	4	2	-	-	-	-
	Glass sand subindustry.....	39	-	1	4	11	16	5	1	1	-	-	-
	Molding sand subindustry.....	93	13	39	16	14	9	2	-	-	-	-	-
145	Industrial sand, n.e.c. subindustry.....	65	2	21	9	17	11	3	1	1	-	-	-
	Clay and related minerals.....	1,080	89	586	147	122	101	23	7	4	1	-	-
	Mineral industries.....	423	70	133	48	61	82	17	7	4	1	-	-
	Included in manufactures.....	657	19	453	99	61	19	6	-	-	-	-	-
	Bentonite.....	44	11	5	3	9	13	3	-	-	-	-	-
	Fire clay (mineral industry)....	155	24	75	27	15	13	1	-	-	-	-	-
	Fuller's earth.....	15	3	1	-	2	4	3	1	1	-	-	-
1452	Kaolin and ball clay.....	48	2	5	3	10	15	5	4	3	1	-	-
1453	Feldspar.....	31	6	10	4	1	9	1	-	-	-	-	-
1454	Clay and related minerals, n.e.c. (mineral industry).....	130	24	37	11	24	28	4	2	-	-	-	-
1455													
1456													
1457													
1458													
1459													
147	Chemical and fertilizer minerals..	235	28	51	23	27	25	32	30	11	8	-	-
1472	Barite.....	54	11	14	4	12	6	5	2	-	-	-	-
1473	Fluorspar.....	30	2	12	5	4	3	2	2	-	-	-	-
1474	Potash, soda, borate minerals...	23	2	5	-	-	1	4	2	4	5	-	-
1475	Phosphate rock.....	66	2	8	11	6	10	13	11	4	1	-	-
1476	Rock salt.....	25	3	5	1	1	3	4	6	2	-	-	-
1477	Sulfur.....	17	2	4	-	1	-	1	7	1	1	-	-
1479	Chemical-fertilizer mining, n.e.c.....	20	6	3	2	3	2	3	-	-	1	-	-
1481	Nonmetallic minerals services.....	119	6	66	25	11	8	3	-	-	-	-	-
149	Miscellaneous minerals, n.e.c.....	490	88	203	72	58	43	15	9	1	1	-	-
	Mineral industries.....	453	87	197	64	52	29	14	8	1	1	-	-
	Included in manufactures.....	37	1	6	8	6	14	1	1	-	-	-	-
1492	Gypsum (mineral industry).....	37	4	9	12	6	4	2	-	-	-	-	-
1493	Mica.....	34	3	14	3	8	4	2	-	-	-	-	-
1494	Native asphalt and bitumens.....	13	-	4	3	2	1	2	1	-	-	-	-
1495	Pumice and pumicite.....	85	23	47	9	5	1	-	-	-	-	-	-
1496	Talc, soapstone, pyrophyllite...	65	12	24	7	13	2	4	2	1	-	-	-
1497	Natural abrasives, except sand..	23	6	7	4	1	4	-	1	-	-	-	-
1498	Peat.....	109	28	56	12	9	2	2	-	-	-	-	-
1499	Nonmetallic minerals, n.e.c.....	87	11	36	14	8	11	2	4	-	1	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Figures for 1963 are not entirely comparable with those for 1958. For 1963, separate reports by district were required from operators of oil and gas field properties in Louisiana, Texas, and New Mexico, whereas only one report for each State was required for 1958.

**TABLE 2. Number of Mineral Operations, Classified by Employment Size, by Geographic Areas: 1963**

Division and State	All operations, total	Operations with an average of--										
		No employees	1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
United States, total.....	40,532	7,968	16,345	5,612	4,864	3,665	1,120	640	228	63	24	3
Mineral industries.....	38,651	7,889	15,328	5,314	4,621	3,499	1,077	612	222	62	24	3
Included in manufac- tures.....	1,881	79	1,017	298	243	166	43	28	6	1	-	-
<b>MINERAL INDUSTRIES</b>												
New England.....	350	27	149	53	63	50	6	2	-	-	-	-
Maine.....	45	8	25	5	5	2	-	-	-	-	-	-
New Hampshire.....	32	1	18	5	5	3	-	-	-	-	-	-
Vermont.....	44	4	19	5	6	3	-	2	-	-	-	-
Massachusetts.....	128	5	44	27	28	22	2	-	-	-	-	-
Rhode Island.....	21	-	12	2	3	4	-	-	-	-	-	-
Connecticut.....	80	9	31	9	16	14	1	-	-	-	-	-
Middle Atlantic.....	4,080	969	1,545	585	458	313	116	52	34	6	2	-
New York.....	518	78	228	85	58	41	12	10	5	1	-	-
New Jersey.....	157	8	45	28	29	31	10	4	2	-	-	-
Pennsylvania.....	3,405	883	1,272	472	371	241	94	38	27	5	2	-
East North Central.....	4,753	927	1,990	678	588	368	92	75	30	4	1	-
Ohio.....	1,541	252	694	224	191	124	34	16	6	-	-	-
Indiana.....	728	153	295	103	101	55	10	9	2	-	-	-
Illinois.....	1,447	297	577	181	183	131	35	30	10	3	-	-
Michigan.....	691	164	287	106	56	39	10	16	11	1	1	-
Wisconsin.....	346	61	137	64	57	19	3	4	1	-	-	-
West North Central.....	3,551	764	1,439	483	472	279	61	41	5	2	5	-
Minnesota.....	334	44	132	56	35	27	12	21	3	1	3	-
Iowa.....	295	36	103	56	68	31	1	-	-	-	-	-
Missouri.....	425	66	129	83	81	44	14	6	-	1	1	-
North Dakota.....	187	48	83	17	16	17	4	2	-	-	-	-
South Dakota.....	131	49	53	10	5	8	5	-	-	-	1	-
Nebraska.....	370	88	159	58	44	18	3	-	-	-	-	-
Kansas.....	1,809	433	780	203	223	134	22	12	2	-	-	-
South Atlantic.....	4,447	597	1,685	687	676	480	154	114	47	7	-	-
Delaware.....	13	-	7	5	1	-	-	-	-	-	-	-
Maryland.....	166	11	67	24	32	22	7	3	-	-	-	-
Virginia.....	944	45	258	207	233	155	33	9	3	1	-	-
West Virginia.....	2,702	465	1,195	358	310	195	60	77	38	4	-	-
North Carolina.....	169	16	51	25	31	35	11	-	-	-	-	-
South Carolina.....	68	4	19	6	14	12	10	3	-	-	-	-
Georgia.....	166	23	29	27	24	37	17	4	4	1	-	-
Florida.....	219	33	59	35	31	24	16	18	2	1	-	-
East South Central.....	3,309	654	1,147	482	463	389	96	53	21	4	-	-
Kentucky.....	2,066	391	786	300	270	225	49	32	11	2	-	-
Tennessee.....	503	137	133	60	86	63	15	6	2	1	-	-
Alabama.....	371	55	99	59	72	56	16	6	7	1	-	-
Mississippi.....	369	71	129	63	35	45	16	9	1	-	-	-
West South Central.....	12,127	2,489	5,007	1,594	1,292	1,135	363	177	45	16	7	2
Arkansas.....	422	84	165	56	57	42	11	5	2	-	-	-
Louisiana.....	1,454	253	497	175	176	207	74	48	12	7	4	1
Oklahoma.....	2,519	426	1,162	340	291	211	56	23	9	-	1	-
Texas.....	7,732	1,726	3,183	1,023	768	675	222	101	22	9	2	1
Mountain.....	3,664	932	1,436	437	344	280	119	61	30	17	7	1
Montana.....	416	113	194	34	35	22	10	4	3	-	-	1
Idaho.....	147	39	69	18	7	3	5	3	2	1	-	-
Wyoming.....	532	117	190	71	53	61	24	12	4	-	-	-
Colorado.....	858	214	367	106	88	50	23	4	4	1	1	-
New Mexico.....	865	207	317	105	87	82	35	19	6	7	-	-
Arizona.....	260	76	93	30	22	13	4	4	9	5	4	-
Utah.....	384	91	126	56	40	39	16	12	1	1	2	-
Nevada.....	202	75	80	17	12	10	2	3	1	2	-	-
Pacific.....	2,370	530	930	315	265	205	70	37	10	6	2	-
Washington.....	248	65	116	31	14	14	5	3	-	-	-	-
Oregon.....	206	29	92	38	25	15	5	2	-	-	-	-
California.....	1,734	372	666	225	207	161	55	30	10	6	2	-
Alaska.....	138	48	43	14	15	12	4	2	-	-	-	-
Hawaii.....	44	16	13	7	4	3	1	-	-	-	-	-

See footnotes at end of table.

**TABLE 2. Number of Mineral Operations, Classified by Employment Size, by Geographic Areas: 1963—Continued**

Division and State	All operations, total	Operations with an average of--										1,000 to 2,499 employees	2,500 employees and over
		No employees	1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees			
INCLUDED IN MANUFACTURES													
United States, total...	1,881	79	1,017	298	243	166	43	28	6	1	-	-	
New England.....	100	11	43	15	11	13	1	4	1	1	-	-	
Maine.....	19	2	10	1	-	4	1	1	-	-	-	-	
New Hampshire.....	7	1	4	1	-	-	-	1	-	-	-	-	
Vermont.....	17	1	5	2	5	2	-	1	-	1	-	-	
Massachusetts.....	30	1	8	9	5	6	-	-	1	-	-	-	
Rhode Island.....	2	-	2	-	-	-	-	-	-	-	-	-	
Connecticut.....	25	6	14	2	1	1	-	1	-	-	-	-	
Middle Atlantic.....	242	3	115	35	47	30	10	2	-	-	-	-	
New York.....	72	-	28	17	17	8	2	-	-	-	-	-	
New Jersey.....	25	-	14	3	6	-	1	1	-	-	-	-	
Pennsylvania.....	145	3	73	15	24	22	7	1	-	-	-	-	
East North Central.....	392	13	236	53	43	28	10	7	2	-	-	-	
Ohio.....	163	6	106	17	16	10	5	2	1	-	-	-	
Indiana.....	53	-	26	7	8	6	1	4	1	-	-	-	
Illinois.....	74	1	42	17	8	2	3	1	-	-	-	-	
Michigan.....	51	4	30	5	7	5	-	-	-	-	-	-	
Wisconsin.....	51	2	32	7	4	5	1	-	-	-	-	-	
West North Central.....	216	12	129	27	19	22	4	2	1	-	-	-	
Minnesota.....	31	3	21	1	-	3	2	1	-	-	-	-	
Iowa.....	48	2	31	5	3	7	-	-	-	-	-	-	
Missouri.....	71	5	35	14	8	7	-	1	1	-	-	-	
North Dakota.....	4	-	2	2	-	-	-	-	-	-	-	-	
South Dakota.....	10	-	7	-	-	1	2	-	-	-	-	-	
Nebraska.....	9	2	5	-	1	1	-	-	-	-	-	-	
Kansas.....	43	-	28	5	7	3	-	-	-	-	-	-	
South Atlantic.....	257	20	143	34	25	21	8	4	2	-	-	-	
Delaware.....	4	-	3	1	-	-	-	-	-	-	-	-	
Maryland.....	23	-	9	4	6	3	-	1	-	-	-	-	
District of Columbia.....	1	-	1	-	-	-	-	-	-	-	-	-	
Virginia.....	41	1	20	7	4	6	1	2	-	-	-	-	
West Virginia.....	13	-	7	4	-	1	1	-	-	-	-	-	
North Carolina.....	57	3	43	4	5	1	-	-	1	-	-	-	
South Carolina.....	26	6	16	2	1	-	1	-	-	-	-	-	
Georgia.....	52	5	19	7	7	7	5	1	1	-	-	-	
Florida.....	40	5	25	5	2	3	-	-	-	-	-	-	
East South Central.....	115	3	61	21	9	15	2	4	-	-	-	-	
Kentucky.....	25	1	16	6	1	1	-	-	-	-	-	-	
Tennessee.....	25	-	11	5	2	4	1	2	-	-	-	-	
Alabama.....	45	-	21	10	3	8	1	2	-	-	-	-	
Mississippi.....	20	2	13	-	3	2	-	-	-	-	-	-	
West South Central.....	192	7	114	33	19	15	3	1	-	-	-	-	
Arkansas.....	30	-	20	4	4	1	1	-	-	-	-	-	
Louisiana.....	19	5	12	-	2	-	-	-	-	-	-	-	
Oklahoma.....	28	1	15	8	3	1	-	-	-	-	-	-	
Texas.....	115	1	67	21	10	13	2	1	-	-	-	-	
Mountain.....	148	5	80	25	31	5	1	1	-	-	-	-	
Montana.....	11	1	9	-	1	-	-	-	-	-	-	-	
Idaho.....	10	-	4	3	3	-	-	-	-	-	-	-	
Wyoming.....	9	1	6	1	1	-	-	-	-	-	-	-	
Colorado.....	39	2	25	7	4	1	-	-	-	-	-	-	
New Mexico.....	16	-	7	3	4	2	-	-	-	-	-	-	
Arizona.....	30	-	16	4	8	-	1	1	-	-	-	-	
Utah.....	21	1	11	2	6	1	-	-	-	-	-	-	
Nevada.....	12	-	2	5	4	1	-	-	-	-	-	-	
Pacific.....	219	5	96	55	39	17	4	3	-	-	-	-	
Washington.....	46	-	29	8	7	2	-	-	-	-	-	-	
Oregon.....	25	1	15	6	3	-	-	-	-	-	-	-	
California.....	140	4	48	39	27	15	4	3	-	-	-	-	
Alaska.....	3	-	1	1	1	-	-	-	-	-	-	-	
Hawaii.....	5	-	3	1	1	-	-	-	-	-	-	-	

Standard Notes: -Represents zero.  
(X) Not applicable.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

TABLE 3. Selected Statistics by Employment Size of Establishment: 1963

Industry and item	All establishments, total	Establishments with an average of-									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
ALL MINERAL INDUSTRIES											
Establishments.....number..	38,651	23,217	5,314	4,621	3,499	1,077	612	222	62	24	3
All employees:											
Total.....do.....	<sup>1</sup> 615,572	30,957	35,347	63,163	106,377	73,692	92,502	77,908	43,837	39,183	10,865
Payroll.....\$1,000..	<sup>13</sup> 742,469	122,756	157,361	300,596	559,852	432,265	602,690	525,680	302,283	278,647	80,672
Production, development, and exploration workers:											
Total.....number..	481,466	27,261	29,186	53,967	91,633	62,639	78,100	65,899	33,104	31,154	8,523
Man-hours.....1,000..	972,983	50,118	55,840	106,992	186,935	129,233	159,458	131,601	68,709	64,080	20,017
Wages.....\$1,000..	2,679,515	108,501	127,159	250,069	462,783	351,555	481,176	422,470	209,883	209,821	56,098
Value added in mining.....do.....	15,910,015	1,151,278	747,786	1,169,507	2,365,651	1,902,511	2,733,700	2,528,655	1,622,815	1,534,821	153,291
Value of shipments and receipts.....do.....	21,620,538	1,586,779	1,019,033	1,808,450	3,887,635	2,769,863	3,519,711	3,088,348	1,883,121	1,832,464	225,134
Capital expenditures.....do.....	3,263,615	410,506	168,623	215,862	452,541	371,654	520,129	418,845	340,050	347,149	18,256
10.—METAL MINING INDUSTRY											
Establishments.....number..	1,614	1,050	151	115	89	60	72	46	17	13	1
All employees:											
Total.....do.....	<sup>1</sup> 77,210	1,109	1,001	1,603	2,668	4,104	10,929	15,590	11,581	23,836	(D)
Payroll.....\$1,000..	<sup>15</sup> 15,207	4,362	4,623	8,554	15,244	26,071	68,071	99,266	76,699	<u>164,553</u>	(D)
Production, development, and exploration workers:											
Total.....number..	62,182	943	800	1,309	2,286	3,460	9,550	13,585	9,644	20,605	(D)
Man-hours.....1,000..	125,663	1,848	1,567	2,733	4,745	7,123	18,708	26,919	20,099	<u>41,921</u>	(D)
Wages.....\$1,000..	383,671	3,729	3,722	6,813	12,615	21,159	56,519	83,199	62,764	<u>133,151</u>	(D)
Value added in mining.....do.....	1,418,217	23,692	11,263	22,190	59,709	108,763	251,943	288,495	197,231	<u>454,931</u>	(D)
Value of shipments and receipts.....do.....	2,128,246	29,813	14,383	34,806	101,251	170,565	372,562	480,347	274,273	<u>650,246</u>	(D)
Capital expenditures.....do.....	230,944	6,843	3,177	3,594	42,582	6,556	71,405	35,762	24,469	<u>36,556</u>	(D)
101.—IRON ORES INDUSTRY											
Establishments.....number..	208	57	22	28	25	20	32	16	5	3	-
All employees:											
Total.....do.....	<sup>1</sup> 23,083	73	157	412	761	1,331	4,699	5,204	8,332	(D)	-
Payroll.....\$1,000..	<sup>1</sup> 61,571	388	797	2,259	4,489	8,740	31,177	34,069	<u>56,303</u>	(D)	-
Production, development, and exploration workers:											
Total.....number..	18,102	45	118	315	683	1,157	4,190	4,613	6,981	(D)	-
Man-hours.....1,000..	34,524	86	217	664	1,466	2,248	7,543	8,759	<u>13,541</u>	(D)	-
Wages.....\$1,000..	112,781	223	543	1,540	3,801	7,170	26,339	29,049	<u>44,116</u>	(D)	-
Value added in mining.....do.....	549,305	7,767	3,730	6,799	20,381	59,328	136,634	115,190	<u>199,476</u>	(D)	-
Value of shipments and receipts.....do.....	762,234	9,611	4,482	12,590	41,819	72,986	163,147	161,501	<u>296,098</u>	(D)	-
Capital expenditures.....do.....	96,644	284	472	421	3,350	1,053	47,909	17,630	<u>25,525</u>	(D)	-
102.—COPPER ORES INDUSTRY											
Establishments.....number..	160	92	17	10	6	3	5	11	8	7	1
All employees:											
Total.....do.....	<sup>1</sup> 26,486	97	108	132	170	198	751	3,933	5,301	<u>13,829</u>	(D)
Payroll.....\$1,000..	<sup>1</sup> 87,307	400	558	601	780	860	4,259	25,392	35,475	<u>101,032</u>	(D)
Production, development, and exploration workers:											
Total.....number..	21,372	85	91	130	127	162	709	3,418	4,279	<u>12,371</u>	(D)
Man-hours.....1,000..	45,319	161	182	207	273	327	1,470	7,135	9,284	<u>26,280</u>	(D)
Wages.....\$1,000..	142,395	359	473	589	574	722	3,958	21,205	28,756	<u>85,759</u>	(D)
Value added in mining.....do.....	417,089	664	73	499	1,550	1,242	12,346	79,942	98,732	<u>222,041</u>	(D)
Value of shipments and receipts.....do.....	670,173	849	276	590	9,046	2,137	23,753	175,311	139,560	<u>318,651</u>	(D)
Capital expenditures.....do.....	87,078	698	605	699	33,615	20	14,048	7,667	9,861	<u>19,865</u>	(D)
103.—LEAD AND ZINC ORES INDUSTRY											
Establishments.....number..	205	121	17	21	16	6	12	9	2	1	-
All employees:											
Total.....do.....	<sup>1</sup> 9,422	139	108	265	512	424	1,996	2,904	2,778	(D)	-
Payroll.....\$1,000..	<sup>1</sup> 49,337	465	406	1,135	2,372	2,461	10,776	16,428	<u>12,816</u>	(D)	-
Production, development, and exploration workers:											
Total.....number..	7,822	119	87	219	438	358	1,798	2,525	2,278	(D)	-
Man-hours.....1,000..	14,781	231	165	461	853	759	3,473	4,972	<u>3,867</u>	(D)	-
Wages.....\$1,000..	37,935	396	338	986	1,978	1,975	9,230	13,577	<u>9,455</u>	(D)	-
Value added in mining.....do.....	84,373	1,186	569	2,231	4,445	4,647	20,641	33,843	<u>16,811</u>	(D)	-
Value of shipments and receipts.....do.....	135,965	1,369	1,038	3,435	8,790	17,869	31,972	49,826	<u>21,666</u>	(D)	-
Capital expenditures.....do.....	11,896	855	142	759	2,106	645	4,054	1,862	<u>1,473</u>	(D)	-

See footnotes at end of table.



TABLE 3. Selected Statistics by Employment Size of Establishment: 1963—Continued

Industry and item	All establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
Lead Ores Subindustry											
Establishments.....number..	125	96	8	8	4	1	5	1	1	1	-
All employees:											
Total.....do.....	14,320	102	43	94	134	992	(D)	2,725	(D)	(D)	-
Payroll.....\$1,000..	21,892	317	121	325	601	5,409	(D)	13,067	(D)	(D)	-
Production, development, and exploration workers:											
Total.....number..	3,401	87	26	66	125	868	(D)	2,229	(D)	(D)	-
Man-hours.....1,000..	5,948	149	50	123	160	1,623	(D)	3,843	(D)	(D)	-
Wages.....\$1,000..	15,333	267	72	244	558	4,485	(D)	9,707	(D)	(D)	-
Value added in mining.....do.....	34,046	999	89	468	250	12,723	(D)	19,517	(D)	(D)	-
Value of shipments and receipts.....do.....	50,743	1,072	136	402	571	24,340	(D)	24,222	(D)	(D)	-
Capital expenditures.....do.....	6,108	674	119	507	287	3,085	(D)	1,436	(D)	(D)	-
Zinc Ores Subindustry											
Establishments.....number..	80	25	9	13	12	5	7	8	1	-	-
All employees:											
Total.....do.....	15,102	37	65	171	378	1,428	(D)	2,957	(D)	-	-
Payroll.....\$1,000..	27,445	148	285	810	1,771	7,828	(D)	16,177	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	4,421	32	61	153	313	1,288	(D)	2,574	(D)	-	-
Man-hours.....1,000..	8,833	82	115	338	693	2,609	(D)	4,996	(D)	-	-
Wages.....\$1,000..	22,602	129	266	742	1,420	6,720	(D)	13,325	(D)	-	-
Value added in mining.....do.....	50,327	187	480	1,763	4,195	12,565	(D)	31,137	(D)	-	-
Value of shipments and receipts.....do.....	85,222	297	902	3,033	8,219	25,501	(D)	47,270	(D)	-	-
Capital expenditures.....do.....	5,788	181	23	252	1,819	1,614	(D)	1,899	(D)	-	-
1042.—LODE GOLD INDUSTRY											
Establishments.....number..	201	176	15	5	2	1	1	-	-	1	-
All employees:											
Total.....do.....	2,397	158	96	130	(D)	2,013	(D)	-	-	(D)	-
Payroll.....\$1,000..	13,861	485	441	749	(D)	12,186	(D)	-	-	(D)	-
Production, development, and exploration workers:											
Total.....number..	2,091	146	77	117	(D)	1,751	(D)	-	-	(D)	-
Man-hours.....1,000..	4,544	294	156	234	(D)	3,860	(D)	-	-	(D)	-
Wages.....\$1,000..	11,422	466	362	679	(D)	9,915	(D)	-	-	(D)	-
Value added in mining.....do.....	21,312	306	383	857	(D)	19,766	(D)	-	-	(D)	-
Value of shipments and receipts.....do.....	26,632	273	238	988	(D)	25,133	(D)	-	-	(D)	-
Capital expenditures.....do.....	2,859	1,392	394	335	(D)	738	(D)	-	-	(D)	-
1043.—PLACER GOLD INDUSTRY											
Establishments.....number..	158	147	6	3	-	1	1	-	-	-	-
All employees:											
Total.....do.....	361	85	35	241	-	(D)	(D)	-	-	-	-
Payroll.....\$1,000..	2,134	304	200	1,630	-	(D)	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	325	82	31	212	-	(D)	(D)	-	-	-	-
Man-hours.....1,000..	731	182	73	476	-	(D)	(D)	-	-	-	-
Wages.....\$1,000..	1,763	263	187	1,313	-	(D)	(D)	-	-	-	-
Value added in mining.....do.....	5,810	623	431	4,756	-	(D)	(D)	-	-	-	-
Value of shipments and receipts.....do.....	7,532	851	457	6,224	-	(D)	(D)	-	-	-	-
Capital expenditures.....do.....	989	803	67	119	-	(D)	(D)	-	-	-	-
1044.—SILVER ORES INDUSTRY											
Establishments.....number..	107	87	6	6	2	2	3	1	-	-	-
All employees:											
Total.....do.....	1,458	76	37	91	144	(D)	1,110	(D)	-	-	-
Payroll.....\$1,000..	8,802	267	138	408	855	(D)	7,134	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,169	32	23	64	130	(D)	920	(D)	-	-	-
Man-hours.....1,000..	2,330	69	46	133	268	(D)	1,814	(D)	-	-	-
Wages.....\$1,000..	6,834	130	65	320	774	(D)	5,545	(D)	-	-	-
Value added in mining.....do.....	21,904	432	48	740	1,458	(D)	19,226	(D)	-	-	-
Value of shipments and receipts.....do.....	26,060	542	-	579	-	24,939	(D)	(D)	-	-	-
Capital expenditures.....do.....	3,338	666	259	429	593	(D)	1,391	(D)	-	-	-

See footnotes at end of table.

TABLE 3. Selected Statistics by Employment Size of Establishment: 1963—Continued

Industry and item	All establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1051.—BAUXITE INDUSTRY											
Establishments.....number..	17	6	3	4	2	-	1	1	-	-	-
All employees:											
Total.....do....	552	8	24	55	465	-	(D)	(D)	-	-	-
Payroll.....\$1,000..	3,442	138	(D)	3,304	(D)	-	(D)	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	414	25	(D)	45	344	-	(D)	(D)	-	-	-
Man-hours.....1,000..	751	45	(D)	706	(D)	-	(D)	(D)	-	-	-
Wages.....\$1,000..	2,285	108	(D)	2,177	(D)	-	(D)	(D)	-	-	-
Value added in mining.....do....	17,464	845	(D)	16,619	(D)	-	(D)	(D)	-	-	-
Value of shipments and receipts.....do....	21,491	1,343	(D)	20,148	(D)	-	(D)	(D)	-	-	-
Capital expenditures.....do....	269	4	(D)	265	(D)	-	(D)	(D)	-	-	-
1062.—MANGANESE ORES INDUSTRY											
Establishments.....number..	17	8	2	2	4	1	-	-	-	-	-
All employees:											
Total.....do....	224	14	99	(D)	111	(D)	-	-	-	-	-
Payroll.....\$1,000..	1,138	47	523	(D)	568	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	180	11	83	(D)	86	(D)	-	-	-	-	-
Man-hours.....1,000..	351	18	148	(D)	185	(D)	-	-	-	-	-
Wages.....\$1,000..	820	35	405	(D)	380	(D)	-	-	-	-	-
Value added in mining.....do....	2,348	4	1,140	(D)	1,204	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	7,228	159	4,580	(D)	2,489	(D)	-	-	-	-	-
Capital expenditures.....do....	386	26	176	(D)	184	(D)	-	-	-	-	-
1064 and 1069.—TUNGSTEN ORES AND FERROALLOY ORES, N.E.C., INDUSTRIES											
Establishments.....number..	41	28	4	3	-	3	1	1	-	1	-
All employees:											
Total.....do....	2,878	34	2,844	(D)	-	(D)	(D)	(D)	-	(D)	-
Payroll.....\$1,000..	19,227	197	19,030	(D)	-	(D)	(D)	(D)	-	(D)	-
Production, development, and exploration workers:											
Total.....number..	2,447	19	2,428	(D)	-	(D)	(D)	(D)	-	(D)	-
Man-hours.....1,000..	4,516	37	4,479	(D)	-	(D)	(D)	(D)	-	(D)	-
Wages.....\$1,000..	14,411	139	14,272	(D)	-	(D)	(D)	(D)	-	(D)	-
Value added in mining.....do....	64,059	(2)	64,177	(D)	-	(D)	(D)	(D)	-	(D)	-
Value of shipments and receipts.....do....	83,476	60	83,416	(D)	-	(D)	(D)	(D)	-	(D)	-
Capital expenditures.....do....	5,445	343	5,102	(D)	-	(D)	(D)	(D)	-	(D)	-
1081.—METAL MINING SERVICES INDUSTRY											
Establishments.....number..	83	49	13	4	10	2	2	3	-	-	-
All employees:											
Total.....do....	2,206	91	84	58	327	567	(D)	1,079	-	-	-
Payroll.....\$1,000..	13,923	376	336	269	2,272	3,433	(D)	7,237	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,891	84	69	51	267	515	(D)	905	-	-	-
Man-hours.....1,000..	4,018	169	122	87	564	1,146	(D)	1,930	-	-	-
Wages.....\$1,000..	11,485	357	239	229	1,786	3,001	(D)	5,873	-	-	-
Value added in mining.....do....	24,736	986	1,201	632	3,967	5,874	(D)	12,076	-	-	-
Value of shipments and receipts.....do....	32,360	1,245	1,395	748	5,365	8,191	(D)	15,416	-	-	-
Capital expenditures.....do....	3,039	154	99	25	250	256	(D)	2,255	-	-	-
1092.—MERCURY ORES INDUSTRY											
Establishments.....number..	49	40	5	1	1	1	1	-	-	-	-
All employees:											
Total.....do....	316	30	32	254	(D)	(D)	(D)	-	-	-	-
Payroll.....\$1,000..	1,839	104	138	1,597	(D)	(D)	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	279	25	27	227	(D)	(D)	(D)	-	-	-	-
Man-hours.....1,000..	610	49	50	511	(D)	(D)	(D)	-	-	-	-
Wages.....\$1,000..	1,562	88	131	1,343	(D)	(D)	(D)	-	-	-	-
Value added in mining.....do....	2,569	180	162	2,227	(D)	(D)	(D)	-	-	-	-
Value of shipments and receipts.....do....	3,658	219	166	3,273	(D)	(D)	(D)	-	-	-	-
Capital expenditures.....do....	317	49	119	149	(D)	(D)	(D)	-	-	-	-

See footnotes at end of table.

TABLE 3. Selected Statistics by Employment Size of Establishment: 1963—Continued

Industry and item	All establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1093.—TITANIUM ORES INDUSTRY											
Establishments.....number..	8	1	-	-	2	-	4	1	-	-	-
All employees:											
Total.....do.....	997	52	-	-	(D)	-	945	(D)	-	-	-
Payroll.....\$1,000..	6,401	6,401	-	-	(D)	-	(D)	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	846	45	-	-	(D)	-	801	(D)	-	-	-
Man-hours.....1,000..	1,721	1,721	-	-	(D)	-	(D)	(D)	-	-	-
Wages.....\$1,000..	5,131	5,131	-	-	(D)	-	(D)	(D)	-	-	-
Value added in mining.....do....	15,021	15,021	-	-	(D)	-	(D)	(D)	-	-	-
Value of shipments and receipts.....do....	22,033	22,033	-	-	(D)	-	(D)	(D)	-	-	-
Capital expenditures.....do....	2,171	2,171	-	-	(D)	-	(D)	(D)	-	-	-
1094.—URANIUM-RADIUM-VANADIUM ORES INDUSTRY											
Establishments.....number..	335	218	41	25	18	19	9	3	2	-	-
All employees:											
Total.....do.....	16,665	285	275	365	550	1,323	1,311	2,413	(D)	-	-
Payroll.....\$1,000..	145,219	1,213	1,372	2,393	3,299	8,179	8,785	18,691	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	5,114	269	242	318	459	1,037	1,015	1,774	(D)	-	-
Man-hours.....1,000..	11,251	505	499	750	921	2,194	2,313	4,069	(D)	-	-
Wages.....\$1,000..	34,170	1,158	1,234	2,137	2,670	6,242	6,720	14,009	(D)	-	-
Value added in mining.....do....	190,629	10,972	3,882	9,178	24,638	32,121	40,692	69,146	(D)	-	-
Value of shipments and receipts.....do....	326,370	13,508	5,364	11,761	29,277	60,385	100,432	105,643	(D)	-	-
Capital expenditures.....do....	15,929	1,496	1,002	471	2,252	2,692	2,845	5,171	(D)	-	-
1099.—METALLIC ORES, N.E.C., INDUSTRY											
Establishments.....number..	25	20	-	3	1	1	-	-	-	-	-
All employees:											
Total.....do.....	165	19	-	146	(D)	(D)	-	-	-	-	-
Payroll.....\$1,000..	1,006	79	-	927	(D)	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	130	18	-	112	(D)	(D)	-	-	-	-	-
Man-hours.....1,000..	216	33	-	183	(D)	(D)	-	-	-	-	-
Wages.....\$1,000..	677	78	-	599	(D)	(D)	-	-	-	-	-
Value added in mining.....do....	1,598	101	-	1,497	(D)	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	3,034	120	-	2,914	(D)	(D)	-	-	-	-	-
Capital expenditures.....do....	584	75	-	509	(D)	(D)	-	-	-	-	-
11.—ANTHRACITE MINING INDUSTRY											
Establishments.....number..	1,069	732	127	108	62	27	7	5	-	1	-
All employees:											
Total.....do.....	111,786	543	839	1,430	1,907	1,874	1,082	3,613	-	(D)	-
Payroll.....\$1,000..	158,835	1,688	3,062	6,508	9,537	9,956	5,562	19,596	-	(D)	-
Production, development, and exploration workers:											
Total.....number..	10,324	534	736	1,296	1,745	1,714	994	3,305	-	(D)	-
Man-hours.....1,000..	19,544	888	1,306	2,445	3,239	3,140	1,798	6,728	-	(D)	-
Wages.....\$1,000..	49,889	1,670	2,761	5,912	8,539	8,858	5,015	17,134	-	(D)	-
Value added in mining.....do....	120,540	10,527	7,551	13,726	20,591	21,452	10,953	35,740	-	(D)	-
Value of shipments and receipts.....do....	236,511	18,285	13,924	27,444	46,795	53,879	26,059	50,125	-	(D)	-
Capital expenditures.....do....	15,111	3,604	1,371	4,189	2,966	1,794	364	823	-	(D)	-
1111.—ANTHRACITE INDUSTRY											
Establishments.....number..	1,026	723	119	99	53	20	6	5	-	1	-
All employees:											
Total.....do.....	110,692	524	782	1,308	1,607	2,360	(D)	3,613	-	(D)	-
Payroll.....\$1,000..	153,022	1,610	2,822	5,804	7,773	12,491	(D)	19,596	-	(D)	-
Production, development, and exploration workers:											
Total.....number..	9,331	516	683	1,180	1,475	2,172	(D)	3,305	-	(D)	-
Man-hours.....1,000..	17,758	850	1,218	2,222	2,680	4,060	(D)	6,728	-	(D)	-
Wages.....\$1,000..	44,867	1,595	2,534	5,244	7,068	11,292	(D)	17,134	-	(D)	-
Value added in mining.....do....	110,527	10,391	6,814	11,922	17,797	27,863	(D)	35,740	-	(D)	-
Value of shipments and receipts.....do....	220,973	18,006	13,012	25,129	42,049	72,652	(D)	50,125	-	(D)	-
Capital expenditures.....do....	12,651	3,444	1,211	3,669	2,471	1,033	(D)	823	-	(D)	-

See footnotes at end of table.

TABLE 3. Selected Statistics by Employment Size of Establishment: 1963—Continued

Industry and item	All establishments, total	Establishments with an average of--									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1112.—ANTHRACITE MINING SERVICES INDUSTRY											
Establishments.....number..	43	9	8	9	9	7	1	-	-	-	-
All employees:											
Total.....do....	1,094	19	57	122	300	596	(D)	-	-	-	-
Payroll.....\$1,000..	5,813	78	240	704	1,764	3,027	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	993	18	53	116	270	536	(D)	-	-	-	-
Man-hours.....1,000..	1,786	38	88	223	559	878	(D)	-	-	-	-
Wages.....\$1,000..	5,022	75	227	668	1,471	2,581	(D)	-	-	-	-
Value added in mining.....do....	10,013	136	737	1,804	2,794	4,542	(D)	-	-	-	-
Value of shipments and receipts.....do....	15,538	279	912	2,315	4,746	7,286	(D)	-	-	-	-
Capital expenditures.....do....	2,460	160	160	520	495	1,125	(D)	-	-	-	-
12.—BITUMINOUS COAL AND LIGNITE MINING INDUSTRY											
Establishments.....number..	6,305	3,073	1,107	959	665	209	191	87	13	1	-
All employees:											
Total.....do....	1133,862	4,951	7,404	12,939	20,134	14,535	29,653	30,624	9,637	(D)	-
Payroll.....\$1,000..	1762,263	15,933	24,673	48,988	89,751	85,240	198,074	205,708	62,092	(D)	-
Production, development, and exploration workers:											
Total.....number..	118,629	4,866	6,486	11,907	18,450	13,286	27,149	27,810	8,675	(D)	-
Man-hours.....1,000..	217,642	7,121	10,241	20,318	33,036	25,690	52,698	52,758	15,780	(D)	-
Wages.....\$1,000..	650,955	15,699	22,189	45,110	81,403	76,656	177,021	179,637	53,240	(D)	-
Value added in mining.....do....	1,606,688	47,727	58,141	110,333	196,206	200,939	444,836	427,373	121,133	(D)	-
Value of shipments and receipts.....do....	2,396,419	79,989	103,342	171,114	320,517	337,396	635,490	586,997	161,574	(D)	-
Capital expenditures.....do....	218,340	18,002	16,601	18,793	37,962	26,747	63,572	32,202	4,461	(D)	-
1211.—BITUMINOUS COAL INDUSTRY											
Establishments.....number..	6,115	2,974	1,070	928	649	202	191	87	13	1	-
All employees:											
Total.....do....	1132,046	4,785	7,172	12,497	19,626	14,067	29,653	30,624	9,637	(D)	-
Payroll.....\$1,000..	1752,491	15,294	23,633	46,696	87,078	82,112	198,074	205,708	62,092	(D)	-
Production, development, and exploration workers:											
Total.....number..	116,975	4,707	6,268	11,501	17,980	12,885	27,149	27,810	8,675	(D)	-
Man-hours.....1,000..	214,421	6,807	9,823	19,454	32,181	24,920	52,698	52,758	15,780	(D)	-
Wages.....\$1,000..	642,338	15,082	21,212	43,069	78,989	74,088	177,021	179,637	53,240	(D)	-
Value added in mining.....do....	1,578,078	45,769	55,479	103,995	189,654	189,839	444,836	427,373	121,133	(D)	-
Value of shipments and receipts.....do....	2,358,326	77,448	99,879	161,697	311,426	323,815	635,490	586,997	161,574	(D)	-
Capital expenditures.....do....	210,835	15,916	16,079	17,857	37,237	23,511	63,572	32,202	4,461	(D)	-
1212.—LIGNITE INDUSTRY											
Establishments.....number..	59	42	6	5	3	3	-	-	-	-	-
All employees:											
Total.....do....	512	53	36	90	110	223	-	-	-	-	-
Payroll.....\$1,000..	2,760	185	183	429	1,963	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	441	49	35	78	94	185	-	-	-	-	-
Man-hours.....1,000..	884	103	80	168	533	(D)	-	-	-	-	-
Wages.....\$1,000..	2,245	166	178	340	1,561	(D)	-	-	-	-	-
Value added in mining.....do....	11,830	529	275	1,859	9,167	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	14,112	760	383	2,783	10,186	(D)	-	-	-	-	-
Capital expenditures.....do....	4,633	(3)	34	17	(3)	(3)	-	-	-	-	-
1213.—BITUMINOUS COAL AND LIGNITE MINING SERVICES INDUSTRY											
Establishments.....number..	131	57	31	26	13	4	-	-	-	-	-
All employees:											
Total.....do....	1,304	113	196	352	398	245	-	-	-	-	-
Payroll.....\$1,000..	7,012	454	857	1,863	3,838	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,213	110	183	328	376	216	-	-	-	-	-
Man-hours.....1,000..	2,337	211	338	696	1,092	(D)	-	-	-	-	-
Wages.....\$1,000..	6,372	451	799	1,701	3,421	(D)	-	-	-	-	-
Value added in mining.....do....	16,780	1,429	2,387	4,479	8,485	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	23,981	1,781	3,080	6,634	12,486	(D)	-	-	-	-	-
Capital expenditures.....do....	2,872	(3)	488	919	(3)	(3)	-	-	-	-	-

See footnotes at end of table.

TABLE 3. Selected Statistics by Employment Size of Establishment: 1963—Continued

Industry and item	All establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
13.—OIL AND GAS EXTRACTION INDUSTRY											
Establishments.....number..	21,242	14,273	2,529	1,993	1,598	513	243	61	21	9	2
All employees:											
Total.....do....	<sup>1</sup> 271,476	17,849	16,747	27,245	49,472	34,745	36,028	21,316	14,986	<u>23,077</u>	(D)
Payroll.....\$1,000..	<sup>1</sup> 1,744,711	73,701	81,292	138,346	279,707	211,960	241,816	157,174	107,735	<u>177,265</u>	(D)
Production, development, and exploration workers:											
Total.....number..	191,976	15,037	13,167	22,399	41,744	28,524	28,393	16,192	10,363	<u>16,157</u>	(D)
Man-hours.....1,000..	397,348	28,207	25,872	45,142	85,275	58,602	60,159	34,067	23,337	<u>36,687</u>	(D)
Wages.....\$1,000..	1,093,048	62,344	61,190	109,867	225,225	165,627	174,550	111,846	64,682	<u>117,717</u>	(D)
Value added in mining.....do....	11,019,796	981,780	560,154	769,119	1,665,328	1,316,104	1,750,284	1,628,970	1,146,631	<u>1,201,426</u>	(D)
Value of shipments and receipts.....do....	14,512,459	1,325,714	740,658	1,244,470	2,838,830	1,832,209	2,121,148	1,790,004	1,255,117	<u>1,364,309</u>	(D)
Capital expenditures.....do....	2,551,692	357,599	128,264	147,564	306,730	299,836	352,868	329,437	300,900	<u>328,494</u>	(D)
1311.—CRUDE PETROLEUM AND NATURAL GAS INDUSTRY											
Establishments.....number..	14,378	11,188	1,418	818	570	204	120	41	13	6	-
All employees:											
Total.....do....	<sup>1</sup> 145,244	12,419	9,255	10,912	17,450	14,053	18,167	14,663	9,367	9,985	-
Payroll.....\$1,000..	<sup>1</sup> 1,016,431	47,640	46,671	57,996	107,934	98,107	130,828	111,878	69,240	79,373	-
Production, development, and exploration workers:											
Total.....number..	83,444	9,874	6,752	8,105	13,178	9,985	12,513	10,409	5,805	6,823	-
Man-hours.....1,000..	166,305	18,006	13,135	16,045	27,091	20,312	25,316	20,991	11,925	13,484	-
Wages.....\$1,000..	494,910	37,644	31,566	39,844	75,071	64,542	81,691	73,979	39,399	51,174	-
Value added in mining.....do....	9,016,372	884,709	434,032	517,328	1,072,675	977,602	1,498,036	1,526,669	1,078,343	1,026,978	-
Value of shipments and receipts.....do....	9,893,763	1,111,624	489,234	584,146	1,144,314	1,061,504	1,635,350	1,646,213	1,151,911	1,069,467	-
Capital expenditures.....do....	2,209,930	316,087	92,764	113,860	251,870	237,699	315,276	308,491	273,305	300,578	-
Crude Petroleum Subindustry											
Establishments.....number..	12,326	9,573	1,258	706	468	171	96	39	9	6	-
All employees:											
Total.....do....	<sup>1</sup> 125,842	10,864	8,208	9,438	14,312	11,781	14,236	20,408	(D)	9,985	-
Payroll.....\$1,000..	<sup>1</sup> 892,632	41,869	40,888	48,926	87,922	82,628	102,945	<u>159,311</u>	(D)	79,373	-
Production, development, and exploration workers:											
Total.....number..	71,707	8,607	6,025	7,160	10,940	8,400	9,790	13,962	(D)	6,823	-
Man-hours.....1,000..	142,847	15,582	11,698	14,137	22,602	16,999	19,986	<u>28,359</u>	(D)	13,484	-
Wages.....\$1,000..	426,811	33,023	27,911	34,472	61,458	54,599	64,292	<u>99,882</u>	(D)	51,174	-
Value added in mining.....do....	7,812,956	662,370	360,250	401,117	826,200	826,365	1,200,937	<u>2,508,739</u>	(D)	1,026,978	-
Value of shipments and receipts.....do....	8,600,086	861,251	412,276	456,457	889,399	898,128	1,323,293	<u>2,689,815</u>	(D)	1,069,467	-
Capital expenditures.....do....	1,906,498	255,549	74,634	81,587	193,459	195,739	242,797	<u>562,155</u>	(D)	300,578	-
Natural Gas Subindustry											
Establishments.....number..	2,052	1,615	160	112	102	33	24	2	4	-	-
All employees:											
Total.....do....	<sup>1</sup> 19,402	1,555	1,047	1,474	3,138	2,272	3,931	3,622	(D)	-	-
Payroll.....\$1,000..	<sup>1</sup> 123,799	5,771	5,783	9,070	20,012	15,479	27,883	<u>21,807</u>	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	11,737	1,267	727	945	2,238	1,585	2,723	2,252	(D)	-	-
Man-hours.....1,000..	23,458	2,424	1,437	1,908	4,489	3,313	5,330	<u>4,557</u>	(D)	-	-
Wages.....\$1,000..	68,099	4,621	3,655	5,372	13,613	9,943	17,399	<u>13,496</u>	(D)	-	-
Value added in mining.....do....	1,203,416	222,339	73,782	116,211	246,475	151,237	297,099	<u>96,273</u>	(D)	-	-
Value of shipments and receipts.....do....	1,293,677	250,373	76,958	127,689	254,915	163,376	312,057	<u>108,309</u>	(D)	-	-
Capital expenditures.....do....	303,432	60,538	18,130	32,273	58,411	41,960	72,479	<u>19,641</u>	(D)	-	-
1321.—NATURAL GAS LIQUIDS INDUSTRY											
Establishments.....number..	652	117	115	175	192	44	9	-	-	-	-
All employees:											
Total.....do....	<sup>1</sup> 13,859	273	778	2,462	5,769	2,750	1,378	-	-	-	-
Payroll.....\$1,000..	<sup>1</sup> 96,553	1,785	5,397	16,984	39,830	18,994	9,880	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	11,939	256	713	2,251	5,078	2,474	1,167	-	-	-	-
Man-hours.....1,000..	24,455	494	1,488	4,615	10,417	5,047	2,394	-	-	-	-
Wages.....\$1,000..	80,745	1,701	4,865	15,364	34,222	16,664	7,929	-	-	-	-
Value added in mining.....do....	762,070	23,781	60,793	120,681	334,908	151,914	69,993	-	-	-	-
Value of shipments and receipts.....do....	2,800,802	112,080	165,436	485,932	1,336,504	498,230	202,620	-	-	-	-
Capital expenditures.....do....	113,856	27,058	25,343	16,461	18,838	20,151	6,005	-	-	-	-

See footnotes at end of table.

TABLE 3. Selected Statistics by Employment Size of Establishment: 1963—Continued

Industry and item	All establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1381.—DRILLING OIL AND GAS WELLS INDUSTRY											
Establishments.....number..	2,836	1,168	431	491	483	177	72	11	3	-	-
All employees:											
Total.....do....	155,416	1,973	2,890	6,858	15,131	12,077	10,314	3,601	2,158	-	-
Payroll.....\$1,000..	318,150	10,247	12,715	31,788	80,926	70,201	67,432	26,283	14,931	-	-
Production, development, and exploration workers:											
Total.....number..	50,333	1,944	2,560	6,236	13,836	10,986	9,499	3,338	1,934	-	-
Man-hours.....1,000..	106,266	3,844	5,019	12,545	28,264	22,812	21,615	7,489	4,678	-	-
Wages.....\$1,000..	281,064	10,108	11,389	28,689	73,117	62,760	58,635	23,724	12,642	-	-
Value added in mining.....do....	653,337	30,687	31,426	69,070	163,155	142,686	129,777	58,097	28,439	-	-
Value of shipments and receipts.....do....	979,316	42,555	42,492	96,410	240,877	214,933	210,430	87,676	43,943	-	-
Capital expenditures.....do....	148,026	8,448	5,603	10,361	25,003	36,738	25,781	15,529	20,563	-	-
1382.—OIL AND GAS FIELD EXPLORATION SERVICES INDUSTRY											
Establishments.....number..	373	225	35	45	33	13	16	4	2	-	-
All employees:											
Total.....do....	18,683	316	226	578	1,004	815	2,489	3,080	(D)	-	-
Payroll.....\$1,000..	147,828	2,023	1,150	2,843	4,847	4,085	12,863	18,376	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	7,232	267	184	508	899	718	2,028	2,628	(D)	-	-
Man-hours.....1,000..	16,246	603	420	1,199	1,957	1,727	4,459	5,881	(D)	-	-
Wages.....\$1,000..	36,915	1,824	949	2,469	4,229	3,388	10,169	13,887	(D)	-	-
Value added in mining.....do....	89,988	6,040	2,013	5,872	8,793	6,632	22,272	38,366	(D)	-	-
Value of shipments and receipts.....do....	119,824	8,952	2,757	7,635	11,080	9,520	32,633	47,247	(D)	-	-
Capital expenditures.....do....	11,726	763	223	734	653	838	2,873	5,642	(D)	-	-
1389.—OIL AND GAS FIELD SERVICES, N.E.C., INDUSTRY											
Establishments.....number..	3,003	1,575	530	464	320	75	26	5	3	3	2
All employees:											
Total.....do....	48,274	2,868	3,598	6,435	10,118	5,050	3,680	3,433	(D)	13,092	(D)
Payroll.....\$1,000..	265,749	12,006	15,359	28,735	46,170	20,573	20,813	24,201	(D)	97,892	(D)
Production, development, and exploration workers:											
Total.....number..	39,028	2,696	2,958	5,299	8,753	4,361	3,186	2,441	(D)	9,334	(D)
Man-hours.....1,000..	84,076	5,260	5,810	10,738	17,546	8,704	6,375	6,440	(D)	23,203	(D)
Wages.....\$1,000..	199,414	11,067	12,421	23,501	38,586	18,273	16,126	12,897	(D)	66,543	(D)
Value added in mining.....do....	498,029	36,563	31,890	56,168	85,797	37,270	30,206	45,687	(D)	174,448	(D)
Value of shipments and receipts.....do....	718,754	50,503	40,739	70,347	106,055	48,022	40,115	68,131	(D)	294,842	(D)
Capital expenditures.....do....	68,154	5,243	4,331	6,148	10,366	4,410	2,933	6,807	(D)	27,916	(D)
Survey, Log, Cement Services Subindustry											
Establishments.....number..	268	145	51	43	20	3	3	-	1	-	2
All employees:											
Total.....do....	11,138	202	343	589	564	159	510	-	8,771	-	(D)
Payroll.....\$1,000..	81,805	1,055	1,932	3,030	3,624	1,174	3,893	-	67,097	-	(D)
Production, development, and exploration workers:											
Total.....number..	8,251	152	248	456	467	125	431	-	6,372	-	(D)
Man-hours.....1,000..	20,584	356	569	1,049	1,190	260	1,270	-	15,890	-	(D)
Wages.....\$1,000..	55,201	793	1,364	2,419	2,879	1,006	3,176	-	23,564	-	(D)
Value added in mining.....do....	173,821	5,086	4,419	7,262	6,914	1,808	6,539	-	141,793	-	(D)
Value of shipments and receipts.....do....	245,335	6,666	5,368	8,594	8,535	3,111	9,239	-	203,822	-	(D)
Capital expenditures.....do....	23,999	421	749	456	1,243	609	787	-	19,734	-	(D)
Miscellaneous Oil and Gas Field Services Subindustry											
Establishments.....number..	2,735	1,430	479	421	300	72	23	5	2	3	-
All employees:											
Total.....do....	37,136	2,666	3,255	5,846	9,554	4,891	3,170	7,754	(D)	(D)	-
Payroll.....\$1,000..	183,944	10,951	13,427	25,705	42,546	19,399	16,920	54,996	(D)	(D)	-
Production, development, and exploration workers:											
Total.....number..	30,777	2,544	2,710	4,843	8,286	4,236	2,755	5,403	(D)	(D)	-
Man-hours.....1,000..	63,492	4,904	5,241	9,689	16,356	8,444	5,105	13,753	(D)	(D)	-
Wages.....\$1,000..	144,213	10,274	11,057	21,082	35,707	17,267	12,950	35,876	(D)	(D)	-
Value added in mining.....do....	324,208	31,477	27,471	48,906	78,883	35,462	23,667	78,342	(D)	(D)	-
Value of shipments and receipts.....do....	473,419	43,837	35,371	61,753	97,520	44,911	30,876	159,151	(D)	(D)	-
Capital expenditures.....do....	44,155	4,822	3,582	5,692	9,123	3,801	2,146	14,989	(D)	(D)	-

See footnotes at end of table.

TABLE 3. Selected Statistics by Employment Size of Establishment: 1963—Continued

Industry and item	All establishments, total	Establishments with an average of--									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
14.—NONMETALLIC MINERALS MINING INDUSTRY											
Establishments.....number..	8,421	4,089	1,400	1,446	1,085	268	99	23	11	-	-
All employees:											
Total.....do.....	<sup>1</sup> 121,238	6,505	9,356	19,946	32,196	18,434	14,810	<u>17,533</u>	(D)	-	-
Payroll.....\$1,000..	<sup>1</sup> 661,453	27,072	43,711	98,200	165,613	99,038	89,167	<u>117,194</u>	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	98,355	5,881	7,997	17,056	27,408	15,655	12,014	<u>12,344</u>	(D)	-	-
Man-hours.....1,000..	212,786	12,054	16,854	36,354	60,640	34,678	26,095	<u>26,111</u>	(D)	-	-
Wages.....\$1,000..	501,952	25,059	37,297	82,367	135,001	79,255	68,071	<u>74,902</u>	(D)	-	-
Value added in mining.....do.....	1744,774	87,552	110,677	254,139	423,817	255,253	275,684	<u>337,652</u>	(D)	-	-
Value of shipments and receipts.....do.....	2346,903	132,978	146,726	330,616	580,242	375,814	364,452	<u>416,075</u>	(D)	-	-
Capital expenditures.....do.....	247,528	24,458	19,210	41,722	62,301	36,721	31,920	<u>31,196</u>	(D)	-	-
1411.—DIMENSION STONE INDUSTRY											
Establishments.....number..	319	200	51	43	22	2	1	-	-	-	-
All employees:											
Total.....do.....	2,156	298	347	571	<u>940</u>	(D)	(D)	-	-	-	-
Payroll.....\$1,000..	7,844	868	1,197	2,018	<u>3,761</u>	(D)	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,970	291	295	518	<u>866</u>	(D)	(D)	-	-	-	-
Man-hours.....1,000..	3,820	499	575	930	<u>1,816</u>	(D)	(D)	-	-	-	-
Wages.....\$1,000..	6,986	852	989	1,797	<u>3,348</u>	(D)	(D)	-	-	-	-
Value added in mining.....do.....	14,842	2,165	2,042	4,196	<u>6,439</u>	(D)	(D)	-	-	-	-
Value of shipments and receipts.....do.....	19,735	2,762	2,761	5,573	<u>8,639</u>	(D)	(D)	-	-	-	-
Capital expenditures.....do.....	1,114	299	161	225	<u>429</u>	(D)	(D)	-	-	-	-
Dimension Limestone Subindustry											
Establishments.....number..	61	41	9	6	5	-	-	-	-	-	-
All employees:											
Total.....do.....	326	50	55	75	146	-	-	-	-	-	-
Payroll.....\$1,000..	1,266	119	180	350	617	-	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	286	48	45	65	128	-	-	-	-	-	-
Man-hours.....1,000..	568	80	86	125	277	-	-	-	-	-	-
Wages.....\$1,000..	1,108	116	139	322	531	-	-	-	-	-	-
Value added in mining.....do.....	2,947	447	326	589	1,585	-	-	-	-	-	-
Value of shipments and receipts.....do.....	3,513	529	467	707	1,810	-	-	-	-	-	-
Capital expenditures.....do.....	282	67	58	53	104	-	-	-	-	-	-
Dimension Granite Subindustry											
Establishments.....number..	66	24	18	14	7	2	1	-	-	-	-
All employees:											
Total.....do.....	824	41	114	186	<u>483</u>	(D)	(D)	-	-	-	-
Payroll.....\$1,000..	3,601	151	423	709	<u>2,318</u>	(D)	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	773	41	109	171	<u>452</u>	(D)	(D)	-	-	-	-
Man-hours.....1,000..	1,645	89	226	331	<u>999</u>	(D)	(D)	-	-	-	-
Wages.....\$1,000..	3,271	151	401	644	<u>2,075</u>	(D)	(D)	-	-	-	-
Value added in mining.....do.....	6,513	361	740	1,727	<u>3,685</u>	(D)	(D)	-	-	-	-
Value of shipments and receipts.....do.....	9,428	500	1,166	2,409	<u>5,353</u>	(D)	(D)	-	-	-	-
Capital expenditures.....do.....	385	10	40	69	<u>266</u>	(D)	(D)	-	-	-	-
Dimension Stone, N.E.C., Subindustry											
Establishments.....number..	192	135	24	23	10	-	-	-	-	-	-
All employees:											
Total.....do.....	1,006	207	178	310	311	-	-	-	-	-	-
Payroll.....\$1,000..	2,977	598	594	959	826	-	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	911	202	141	282	286	-	-	-	-	-	-
Man-hours.....1,000..	1,607	330	263	474	540	-	-	-	-	-	-
Wages.....\$1,000..	2,607	585	449	831	742	-	-	-	-	-	-
Value added in mining.....do.....	5,382	1,357	976	1,880	1,169	-	-	-	-	-	-
Value of shipments and receipts.....do.....	6,794	1,733	1,128	2,457	1,476	-	-	-	-	-	-
Capital expenditures.....do.....	447	222	63	103	59	-	-	-	-	-	-

See footnotes at end of table.

TABLE 3. Selected Statistics by Employment Size of Establishment: 1963—Continued

Industry and item	All establishments, total	Establishments with an average of--									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1421.—CRUSHED AND BROKEN STONE INDUSTRY											
Establishments.....number..	2,256	697	317	574	500	127	35	5	1	-	-
All employees:											
Total.....do....	143,236	1,136	2,163	8,176	14,873	8,617	4,879	2,053	(D)	-	-
Payroll.....\$1,000..	229,115	5,108	9,749	39,785	75,199	45,791	29,687	11,586	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	36,186	1,063	1,878	7,094	12,743	7,426	4,105	1,877	(D)	-	-
Man-hours.....1,000..	80,834	2,270	4,153	15,493	29,080	16,827	9,063	3,948	(D)	-	-
Wages.....\$1,000..	177,843	4,826	8,449	32,929	61,207	36,848	23,031	10,553	(D)	-	-
Value added in mining.....do....	581,655	22,162	26,311	99,242	199,556	122,048	87,608	24,728	(D)	-	-
Value of shipments and receipts.....do....	794,860	34,170	36,469	136,179	267,569	168,771	120,203	31,499	(D)	-	-
Capital expenditures.....do....	82,687	4,327	5,167	17,070	28,671	15,446	8,940	3,066	(D)	-	-
Crushed and Broken Limestone Subindustry											
Establishments.....number..	1,612	449	229	443	373	92	21	4	1	-	-
All employees:											
Total.....do....	131,095	739	1,570	6,349	10,911	6,108	4,673	(D)	(D)	-	-
Payroll.....\$1,000..	160,588	3,146	6,911	30,220	53,724	32,094	27,619	(D)	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	26,331	687	1,376	5,549	9,233	5,323	4,163	(D)	(D)	-	-
Man-hours.....1,000..	59,365	1,591	3,079	12,256	21,287	12,188	8,964	(D)	(D)	-	-
Wages.....\$1,000..	126,791	2,974	6,049	25,103	42,902	26,230	23,533	(D)	(D)	-	-
Value added in mining.....do....	408,450	15,381	19,085	76,201	141,994	87,715	68,074	(D)	(D)	-	-
Value of shipments and receipts.....do....	542,886	23,393	25,853	103,400	186,487	116,635	87,118	(D)	(D)	-	-
Capital expenditures.....do....	59,535	3,230	3,602	12,960	22,143	10,754	6,846	(D)	(D)	-	-
Crushed and Broken Granite Subindustry											
Establishments.....number..	150	44	13	28	42	18	4	1	-	-	-
All employees:											
Total.....do....	4,060	70	92	380	1,366	1,350	802	(D)	-	-	-
Payroll.....\$1,000..	19,826	329	448	1,692	6,451	6,462	4,444	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	3,449	63	79	312	1,235	1,115	645	(D)	-	-	-
Man-hours.....1,000..	7,894	137	179	670	2,770	2,635	1,503	(D)	-	-	-
Wages.....\$1,000..	16,010	305	386	1,374	5,538	4,947	3,460	(D)	-	-	-
Value added in mining.....do....	61,702	1,520	1,252	4,234	22,408	16,340	15,948	(D)	-	-	-
Value of shipments and receipts.....do....	89,749	2,105	1,851	5,860	30,403	24,709	24,821	(D)	-	-	-
Capital expenditures.....do....	7,185	190	147	801	2,105	2,677	1,265	(D)	-	-	-
Crushed and Broken Stone, N.E.C., Subindustry											
Establishments.....number..	494	204	75	103	85	17	10	-	-	-	-
All employees:											
Total.....do....	18,081	327	501	1,447	2,596	1,159	1,457	-	-	-	-
Payroll.....\$1,000..	148,701	1,633	2,390	7,873	15,024	7,235	9,210	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	6,406	313	423	1,233	2,275	988	1,174	-	-	-	-
Man-hours.....1,000..	13,575	542	895	2,567	5,023	2,004	2,544	-	-	-	-
Wages.....\$1,000..	35,042	1,547	2,014	6,452	12,767	5,671	6,591	-	-	-	-
Value added in mining.....do....	111,503	5,261	5,974	18,807	35,154	17,993	28,314	-	-	-	-
Value of shipments and receipts.....do....	162,225	8,672	8,765	26,919	50,679	27,427	39,763	-	-	-	-
Capital expenditures.....do....	15,967	907	1,418	3,309	4,423	2,015	3,895	-	-	-	-
1441.—SAND AND GRAVEL INDUSTRY											
Establishments.....number..	4,616	2,554	872	678	419	73	18	2	-	-	-
All employees:											
Total.....do....	140,142	4,127	5,768	9,004	12,205	4,738	3,224	(D)	-	-	-
Payroll.....\$1,000..	212,160	17,665	28,219	46,336	65,372	26,819	18,967	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	33,042	3,660	4,889	7,582	10,269	4,079	2,563	(D)	-	-	-
Man-hours.....1,000..	70,620	7,597	10,282	16,178	22,114	9,042	5,407	(D)	-	-	-
Wages.....\$1,000..	170,333	16,168	23,908	39,682	53,826	22,559	14,190	(D)	-	-	-
Value added in mining.....do....	513,728	49,371	69,203	127,603	162,517	61,733	43,301	(D)	-	-	-
Value of shipments and receipts.....do....	678,068	78,048	90,447	155,300	215,141	85,786	53,346	(D)	-	-	-
Capital expenditures.....do....	75,724	12,127	10,917	18,509	22,995	7,720	3,456	(D)	-	-	-

See footnotes at end of table.



TABLE 3. Selected Statistics by Employment Size of Establishment: 1963—Continued

Industry and item	All establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
Construction Sand and Gravel Subindustry											
Establishments.....number..	4,419	2,478	843	636	383	63	16	-	-	-	-
All employees:											
Total.....do.....	<sup>1</sup> 36,394	3,978	5,582	8,416	11,108	4,069	2,326	-	-	-	-
Payroll.....\$1,000..	<sup>1</sup> 90,924	17,105	27,361	43,333	59,433	22,996	13,201	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	30,024	3,526	4,722	7,100	9,287	3,509	1,880	-	-	-	-
Man-hours.....1,000..	64,014	7,347	9,940	15,127	19,951	7,814	3,835	-	-	-	-
Wages.....\$1,000..	154,546	15,680	23,140	37,348	48,804	19,394	10,180	-	-	-	-
Value added in mining.....do....	459,288	47,704	66,360	119,693	146,320	50,517	28,694	-	-	-	-
Value of shipments and receipts.....do....	607,539	75,808	86,695	144,841	193,540	71,030	35,625	-	-	-	-
Capital expenditures.....do....	68,954	11,909	10,720	17,584	20,550	5,860	2,331	-	-	-	-
Glass Sand Subindustry											
Establishments.....number..	39	1	4	11	16	5	1	1	-	-	-
All employees:											
Total.....do.....	<sup>1</sup> 1,570	27	(D)	157	452	<u>839</u>	(D)	(D)	-	-	-
Payroll.....\$1,000..	<sup>1</sup> 9,140	<u>154</u>	(D)	855	2,440	<u>5,010</u>	(D)	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,223	23	(D)	122	405	<u>672</u>	(D)	(D)	-	-	-
Man-hours.....1,000..	2,738	41	(D)	279	900	<u>1,518</u>	(D)	(D)	-	-	-
Wages.....\$1,000..	6,650	<u>140</u>	(D)	604	2,048	<u>3,858</u>	(D)	(D)	-	-	-
Value added in mining.....do....	22,649	<u>319</u>	(D)	2,548	7,041	<u>12,741</u>	(D)	(D)	-	-	-
Value of shipments and receipts.....do....	29,099	<u>635</u>	(D)	3,533	9,067	<u>15,864</u>	(D)	(D)	-	-	-
Capital expenditures.....do....	3,998	<u>31</u>	(D)	230	1,572	<u>2,165</u>	(D)	(D)	-	-	-
Molding Sand Subindustry											
Establishments.....number..	93	52	16	14	9	2	-	-	-	-	-
All employees:											
Total.....do.....	<sup>1</sup> 927	97	109	189	<u>466</u>	(D)	-	-	-	-	-
Payroll.....\$1,000..	<sup>1</sup> 4,992	362	439	911	<u>2,674</u>	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	764	88	103	153	<u>420</u>	(D)	-	-	-	-	-
Man-hours.....1,000..	1,546	156	200	296	<u>894</u>	(D)	-	-	-	-	-
Wages.....\$1,000..	3,776	302	417	703	<u>2,354</u>	(D)	-	-	-	-	-
Value added in mining.....do....	12,838	1,118	1,808	2,057	<u>7,855</u>	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	16,642	1,498	2,228	2,548	<u>10,368</u>	(D)	-	-	-	-	-
Capital expenditures.....do....	904	125	106	198	<u>475</u>	(D)	-	-	-	-	-
Industrial Sand, N.E.C., Subindustry											
Establishments.....number..	65	23	9	17	11	3	1	1	-	-	-
All employees:											
Total.....do.....	1,251	<u>102</u>	(D)	242	<u>907</u>	(D)	(D)	(D)	-	-	-
Payroll.....\$1,000..	7,104	<u>463</u>	(D)	1,237	<u>5,404</u>	(D)	(D)	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,031	87	(D)	207	<u>737</u>	(D)	(D)	(D)	-	-	-
Man-hours.....1,000..	2,322	<u>195</u>	(D)	476	<u>1,651</u>	(D)	(D)	(D)	-	-	-
Wages.....\$1,000..	5,361	<u>397</u>	(D)	1,027	<u>3,937</u>	(D)	(D)	(D)	-	-	-
Value added in mining.....do....	18,953	<u>1,265</u>	(D)	3,305	<u>14,383</u>	(D)	(D)	(D)	-	-	-
Value of shipments and receipts.....do....	24,788	<u>1,631</u>	(D)	4,378	<u>18,779</u>	(D)	(D)	(D)	-	-	-
Capital expenditures.....do....	1,868	<u>153</u>	(D)	497	<u>1,218</u>	(D)	(D)	(D)	-	-	-
1452.—BENTONITE INDUSTRY											
Establishments.....number..	44	16	3	9	13	3	-	-	-	-	-
All employees:											
Total.....do.....	811	11	21	183	<u>596</u>	(D)	-	-	-	-	-
Payroll.....\$1,000..	4,127	29	51	947	<u>3,100</u>	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	644	10	18	118	<u>498</u>	(D)	-	-	-	-	-
Man-hours.....1,000..	1,508	20	27	250	<u>1,211</u>	(D)	-	-	-	-	-
Wages.....\$1,000..	3,141	28	32	507	<u>2,574</u>	(D)	-	-	-	-	-
Value added in mining.....do....	11,435	69	366	1,962	<u>9,038</u>	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	18,105	133	381	3,387	<u>14,204</u>	(D)	-	-	-	-	-
Capital expenditures.....do....	1,356	9	105	268	<u>974</u>	(D)	-	-	-	-	-

See footnotes at end of table.

TABLE 3. Selected Statistics by Employment Size of Establishment: 1963—Continued

Industry and item	All establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1453.—FIRE CLAY INDUSTRY											
Establishments.....number..	155	99	27	15	13	1	-	-	-	-	-
All employees:											
Total.....do....	979	165	189	231	394	(D)	-	-	-	-	-
Payroll.....\$1,000..	4,608	640	797	1,076	2,095	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	861	153	169	217	322	(D)	-	-	-	-	-
Man-hours.....1,000..	1,640	292	312	412	624	(D)	-	-	-	-	-
Wages.....\$1,000..	3,795	611	693	924	1,567	(D)	-	-	-	-	-
Value added in mining.....do....	12,640	3,376	3,162	1,771	4,331	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	17,105	4,194	3,682	2,746	6,483	(D)	-	-	-	-	-
Capital expenditures.....do....	2,159	565	447	350	797	(D)	-	-	-	-	-
1454.—FULLER'S EARTH INDUSTRY											
Establishments.....number..	15	4	-	2	4	3	1	1	-	-	-
All employees:											
Total.....do....	758	35	-	(D)	88	635	(D)	(D)	-	-	-
Payroll.....\$1,000..	3,067	145	-	(D)	338	2,584	(D)	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	653	29	-	(D)	81	543	(D)	(D)	-	-	-
Man-hours.....1,000..	1,363	65	-	(D)	176	1,122	(D)	(D)	-	-	-
Wages.....\$1,000..	2,423	121	-	(D)	290	2,012	(D)	(D)	-	-	-
Value added in mining.....do....	9,071	323	-	(D)	918	7,830	(D)	(D)	-	-	-
Value of shipments and receipts.....do....	12,954	460	-	(D)	1,264	11,230	(D)	(D)	-	-	-
Capital expenditures.....do....	1,173	15	-	(D)	215	943	(D)	(D)	-	-	-
1455.—KAOLIN AND BALL CLAY INDUSTRY											
Establishments.....number..	48	7	3	10	15	5	4	3	1	-	-
All employees:											
Total.....do....	3,346	13	19	136	479	354	2,345	(D)	(D)	-	-
Payroll.....\$1,000..	17,718	39	80	609	2,112	1,617	13,261	(D)	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	2,916	12	16	127	435	298	2,028	(D)	(D)	-	-
Man-hours.....1,000..	6,123	25	29	257	928	589	4,295	(D)	(D)	-	-
Wages.....\$1,000..	14,500	35	70	548	1,823	1,178	10,846	(D)	(D)	-	-
Value added in mining.....do....	49,841	224	259	1,590	6,145	6,913	34,710	(D)	(D)	-	-
Value of shipments and receipts.....do....	66,077	271	343	2,327	8,725	8,656	45,755	(D)	(D)	-	-
Capital expenditures.....do....	5,237	5	43	144	946	1,026	3,073	(D)	(D)	-	-
1456.—FELDSPAR INDUSTRY											
Establishments.....number..	31	16	4	1	9	1	-	-	-	-	-
All employees:											
Total.....do....	461	37	27	(D)	397	(D)	-	-	-	-	-
Payroll.....\$1,000..	1,963	142	69	(D)	1,752	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	394	31	20	(D)	343	(D)	-	-	-	-	-
Man-hours.....1,000..	850	61	40	(D)	749	(D)	-	-	-	-	-
Wages.....\$1,000..	1,749	117	63	(D)	1,569	(D)	-	-	-	-	-
Value added in mining.....do....	6,117	178	789	(D)	5,150	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	8,459	362	132	(D)	7,965	(D)	-	-	-	-	-
Capital expenditures.....do....	1,702	5	826	(D)	871	(D)	-	-	-	-	-
1459.—CLAY AND RELATED MINERALS, N.E.C., INDUSTRY											
Establishments.....number..	130	61	11	24	28	4	2	-	-	-	-
All employees:											
Total.....do....	1,961	73	63	340	912	573	(D)	-	-	-	-
Payroll.....\$1,000..	10,688	230	242	1,592	5,138	3,486	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,679	70	55	296	769	489	(D)	-	-	-	-
Man-hours.....1,000..	3,577	142	101	613	1,674	1,047	(D)	-	-	-	-
Wages.....\$1,000..	8,507	225	217	1,319	3,937	2,809	(D)	-	-	-	-
Value added in mining.....do....	24,481	1,055	562	3,749	10,192	8,923	(D)	-	-	-	-
Value of shipments and receipts.....do....	38,944	1,552	723	5,532	17,735	13,402	(D)	-	-	-	-
Capital expenditures.....do....	2,992	338	68	606	1,786	194	(D)	-	-	-	-

See footnotes at end of table.

TABLE 3. Selected Statistics by Employment Size of Establishment: 1963—Continued

Industry and item	All establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
147.—CHEMICAL AND FERTILIZER MINERALS INDUSTRY											
Establishments.....number..	235	79	23	27	25	32	30	11	8	-	-
All employees:											
Total.....do....	21,040	106	159	364	794	2,695	4,969	4,529	7,424	-	-
Payroll.....\$1,000..	137,108	363	718	1,558	3,602	14,828	30,597	31,804	53,638	-	-
Production, development, and exploration workers:											
Total.....number..	14,595	90	136	314	660	2,043	3,774	3,175	4,403	-	-
Man-hours.....1,000..	31,213	191	275	667	1,379	4,302	8,364	6,859	9,176	-	-
Wages.....\$1,000..	85,678	299	625	1,230	2,717	10,098	21,887	20,465	28,357	-	-
Value added in mining.....do....	433,313	1,018	1,789	3,886	11,477	38,796	124,428	113,549	138,370	-	-
Value of shipments and receipts.....do....	576,904	1,570	3,613	6,542	20,673	77,225	160,175	134,989	172,117	-	-
Capital expenditures.....do....	60,021	5,058	246	1,427	3,014	9,618	17,012	15,299	8,347	-	-
1472.—BARITE INDUSTRY											
Establishments.....number..	54	25	4	12	6	5	2	-	-	-	-
All employees:											
Total.....do....	1,434	23	30	160	183	1,038	(D)	-	-	-	-
Payroll.....\$1,000..	6,799	58	134	662	693	2,252	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	911	18	27	141	155	570	(D)	-	-	-	-
Man-hours.....1,000..	1,887	37	57	297	336	1,160	(D)	-	-	-	-
Wages.....\$1,000..	3,605	47	127	556	544	2,331	(D)	-	-	-	-
Value added in mining.....do....	11,107	380	338	1,720	1,418	7,251	(D)	-	-	-	-
Value of shipments and receipts.....do....	16,668	616	734	2,148	1,752	11,418	(D)	-	-	-	-
Capital expenditures.....do....	1,101	87	-	211	325	478	(D)	-	-	-	-
1473.—FLUORSPAR INDUSTRY											
Establishments.....number..	30	14	5	4	3	2	2	-	-	-	-
All employees:											
Total.....do....	804	30	33	60	105	576	(D)	-	-	-	-
Payroll.....\$1,000..	3,981	122	170	217	507	2,965	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	682	29	27	51	79	496	(D)	-	-	-	-
Man-hours.....1,000..	1,346	58	47	113	147	981	(D)	-	-	-	-
Wages.....\$1,000..	3,037	122	136	154	341	2,284	(D)	-	-	-	-
Value added in mining.....do....	8,869	205	751	810	1,254	5,849	(D)	-	-	-	-
Value of shipments and receipts.....do....	15,792	392	1,147	1,174	4,762	8,317	(D)	-	-	-	-
Capital expenditures.....do....	313	23	27	5	13	245	(D)	-	-	-	-
1474.—POTASH, SODA, AND BORATE MINERALS INDUSTRY											
Establishments.....number..	23	7	-	-	1	4	2	4	5	-	-
All employees:											
Total.....do....	7,050	12	-	-	639	(D)	(D)	1,586	4,813	-	-
Payroll.....\$1,000..	51,859	71	-	-	4,727	(D)	(D)	11,243	35,818	-	-
Production, development, and exploration workers:											
Total.....number..	4,822	6	-	-	447	(D)	(D)	1,244	3,125	-	-
Man-hours.....1,000..	9,849	14	-	-	1,024	(D)	(D)	2,493	6,318	-	-
Wages.....\$1,000..	32,901	24	-	-	3,145	(D)	(D)	8,519	21,213	-	-
Value added in mining.....do....	156,151	45	-	-	12,783	(D)	(D)	48,785	94,538	-	-
Value of shipments and receipts.....do....	192,116	46	-	-	19,457	(D)	(D)	54,531	118,082	-	-
Capital expenditures.....do....	26,773	4,918	-	-	8,400	(D)	(D)	6,659	6,796	-	-
1475.—PHOSPHATE ROCK INDUSTRY											
Establishments.....number..	66	10	11	6	10	13	11	4	1	-	-
All employees:											
Total.....do....	5,624	13	80	77	301	1,039	1,401	2,713	(D)	-	-
Payroll.....\$1,000..	31,955	46	349	409	1,423	5,437	6,762	17,529	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	3,996	12	71	64	267	874	1,136	1,572	(D)	-	-
Man-hours.....1,000..	9,047	24	148	134	537	1,838	2,644	3,722	(D)	-	-
Wages.....\$1,000..	20,642	43	310	284	1,149	4,376	5,335	9,145	(D)	-	-
Value added in mining.....do....	94,889	151	535	976	4,947	21,178	33,685	33,417	(D)	-	-
Value of shipments and receipts.....do....	161,658	189	1,550	2,461	10,099	50,724	48,667	47,968	(D)	-	-
Capital expenditures.....do....	22,234	9	187	1,097	264	2,313	11,111	7,253	(D)	-	-

See footnotes at end of table.

TABLE 3. Selected Statistic by Employment Size of Establishment: 1963—Continued

Industry and item	All establishments, total	Establishments with an average of--									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1476.—ROCK SALT INDUSTRY											
Establishments.....number..	25	8	1	1	3	4	6	2	-	-	-
All employees:											
Total.....do.....	2,443	9	125	(D)	(D)	356	1,953	(D)	-	-	-
Payroll.....\$1,000..	15,955	22	572	(D)	(D)	2,079	13,282	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,812	8	94	(D)	(D)	233	1,477	(D)	-	-	-
Man-hours.....1,000..	4,260	19	203	(D)	(D)	514	3,524	(D)	-	-	-
Wages.....\$1,000..	11,142	21	389	(D)	(D)	1,138	9,594	(D)	-	-	-
Value added in mining.....do.....	49,539	89	3,025	(D)	(D)	3,730	42,695	(D)	-	-	-
Value of shipments and receipts.....do.....	59,297	130	2,726	(D)	(D)	5,281	51,160	(D)	-	-	-
Capital expenditures.....do.....	7,401	6	2,396	(D)	(D)	174	4,825	(D)	-	-	-
1477.—SULFUR INDUSTRY											
Establishments.....number..	17	6	-	1	-	1	7	1	1	-	-
All employees:											
Total.....do.....	2,603	10	-	2,593	-	(D)	(D)	(D)	(D)	-	-
Payroll.....\$1,000..	20,597	29	-	20,568	-	(D)	(D)	(D)	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	1,600	9	-	1,591	-	(D)	(D)	(D)	(D)	-	-
Man-hours.....1,000..	3,264	18	-	3,246	-	(D)	(D)	(D)	(D)	-	-
Wages.....\$1,000..	10,578	28	-	10,550	-	(D)	(D)	(D)	(D)	-	-
Value added in mining.....do.....	100,349	2	-	100,347	-	(D)	(D)	(D)	(D)	-	-
Value of shipments and receipts.....do.....	113,103	15	-	113,088	-	(D)	(D)	(D)	(D)	-	-
Capital expenditures.....do.....	1,086	2	-	1,084	-	(D)	(D)	(D)	(D)	-	-
1479.—CHEMICAL AND FERTILIZER MINING, N.E.C., INDUSTRY											
Establishments.....number..	20	9	2	3	2	3	-	-	1	-	-
All employees:											
Total.....do.....	1,082	9	53	(D)	1,020	(D)	-	-	(D)	-	-
Payroll.....\$1,000..	5,962	15	226	(D)	5,721	(D)	-	-	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	772	8	41	(D)	723	(D)	-	-	(D)	-	-
Man-hours.....1,000..	1,560	21	86	(D)	1,453	(D)	-	-	(D)	-	-
Wages.....\$1,000..	3,773	14	187	(D)	3,572	(D)	-	-	(D)	-	-
Value added in mining.....do.....	12,409	146	363	(D)	11,900	(D)	-	-	(D)	-	-
Value of shipments and receipts.....do.....	18,270	182	815	(D)	17,273	(D)	-	-	(D)	-	-
Capital expenditures.....do.....	1,113	13	43	(D)	1,057	(D)	-	-	(D)	-	-
1481.—NONMETALLIC MINERALS SERVICES INDUSTRY											
Establishments.....number..	119	72	25	11	8	3	-	-	-	-	-
All employees:											
Total.....do.....	871	138	161	149	245	178	-	-	-	-	-
Payroll.....\$1,000..	4,581	458	752	496	1,491	1,384	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	806	133	146	130	225	172	-	-	-	-	-
Man-hours.....1,000..	1,575	251	288	231	470	335	-	-	-	-	-
Wages.....\$1,000..	4,209	451	662	464	1,271	1,361	-	-	-	-	-
Value added in mining.....do.....	9,326	1,698	1,593	971	2,570	2,494	-	-	-	-	-
Value of shipments and receipts.....do.....	13,246	2,162	2,137	1,415	4,120	3,412	-	-	-	-	-
Capital expenditures.....do.....	1,434	336	345	148	152	453	-	-	-	-	-
1492.—GYPSUM INDUSTRY											
Establishments.....number..	37	13	12	6	4	2	-	-	-	-	-
All employees:											
Total.....do.....	458	20	94	89	255	(D)	-	-	-	-	-
Payroll.....\$1,000..	2,406	54	499	481	1,372	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	383	18	74	76	215	(D)	-	-	-	-	-
Man-hours.....1,000..	807	34	158	153	462	(D)	-	-	-	-	-
Wages.....\$1,000..	1,913	49	374	410	1,080	(D)	-	-	-	-	-
Value added in mining.....do.....	7,753	270	1,423	1,510	4,550	(D)	-	-	-	-	-
Value of shipments and receipts.....do.....	10,160	656	1,657	1,716	6,131	(D)	-	-	-	-	-
Capital expenditures.....do.....	1,279	52	181	569	477	(D)	-	-	-	-	-

See footnotes at end of table.

TABLE 3. Selected Statistics by Employment Size of Establishment: 1963—Continued

Industry and item	All establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1493.—MICA INDUSTRY											
Establishments.....number..	34	17	3	8	4	2	-	-	-	-	-
All employees:											
Total.....do....	398	23	21	110	244	(D)	-	-	-	-	-
Payroll.....\$1,000..	1,582	79	66	422	1,015	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	357	15	20	105	217	(D)	-	-	-	-	-
Man-hours.....1,000..	733	31	52	173	477	(D)	-	-	-	-	-
Wages.....\$1,000..	1,299	54	60	373	812	(D)	-	-	-	-	-
Value added in mining.....do....	3,925	575	138	923	2,289	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	5,560	711	182	1,310	3,357	(D)	-	-	-	-	-
Capital expenditures.....do....	860	96	39	97	628	(D)	-	-	-	-	-
1494.—NATIVE ASPHALT AND BITUMENS INDUSTRY											
Establishments.....number..	13	4	3	2	1	2	1	-	-	-	-
All employees:											
Total.....do....	422	12	92	(D)	(D)	318	(D)	-	-	-	-
Payroll.....\$1,000..	2,241	42	620	(D)	(D)	1,579	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	357	12	82	(D)	(D)	263	(D)	-	-	-	-
Man-hours.....1,000..	728	23	166	(D)	(D)	539	(D)	-	-	-	-
Wages.....\$1,000..	1,723	42	474	(D)	(D)	1,207	(D)	-	-	-	-
Value added in mining.....do....	6,333	73	948	(D)	(D)	5,312	(D)	-	-	-	-
Value of shipments and receipts.....do....	8,509	83	1,073	(D)	(D)	7,353	(D)	-	-	-	-
Capital expenditures.....do....	1,081	3	155	(D)	(D)	923	(D)	-	-	-	-
1495.—PUMICE AND PUMICITE INDUSTRY											
Establishments.....number..	85	70	9	5	1	-	-	-	-	-	-
All employees:											
Total.....do....	247	99	54	94	(D)	-	-	-	-	-	-
Payroll.....\$1,000..	1,056	412	263	381	(D)	-	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	222	92	47	83	(D)	-	-	-	-	-	-
Man-hours.....1,000..	428	163	97	168	(D)	-	-	-	-	-	-
Wages.....\$1,000..	981	394	235	352	(D)	-	-	-	-	-	-
Value added in mining.....do....	4,198	2,313	569	1,316	(D)	-	-	-	-	-	-
Value of shipments and receipts.....do....	5,358	2,976	745	1,637	(D)	-	-	-	-	-	-
Capital expenditures.....do....	682	393	78	211	(D)	-	-	-	-	-	-
1496.—TALC, SOAPSTONE, AND PYROPHYLLITE INDUSTRY											
Establishments.....number..	65	36	7	13	2	4	2	1	-	-	-
All employees:											
Total.....do....	1,276	56	45	245	(D)	244	657	(D)	-	-	-
Payroll.....\$1,000..	16,627	259	214	1,270	(D)	1,074	3,415	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,054	48	40	200	(D)	221	545	(D)	-	-	-
Man-hours.....1,000..	2,229	75	81	420	(D)	481	1,172	(D)	-	-	-
Wages.....\$1,000..	5,390	251	201	939	(D)	885	3,114	(D)	-	-	-
Value added in mining.....do....	13,746	1,004	514	2,845	(D)	2,213	7,170	(D)	-	-	-
Value of shipments and receipts.....do....	17,534	953	858	4,024	(D)	2,914	8,785	(D)	-	-	-
Capital expenditures.....do....	1,148	204	126	352	(D)	98	368	(D)	-	-	-
1497.—NATURAL ABRASIVES, EXCEPT SAND, INDUSTRY											
Establishments.....number..	23	13	4	1	4	-	1	-	-	-	-
All employees:											
Total.....do....	294	15	64	(D)	215	-	(D)	-	-	-	-
Payroll.....\$1,000..	1,583	53	391	(D)	1,139	-	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	216	8	37	(D)	171	-	(D)	-	-	-	-
Man-hours.....1,000..	466	13	63	(D)	390	-	(D)	-	-	-	-
Wages.....\$1,000..	1,048	53	159	(D)	836	-	(D)	-	-	-	-
Value added in mining.....do....	4,125	170	667	(D)	3,288	-	(D)	-	-	-	-
Value of shipments and receipts.....do....	5,002	232	795	(D)	3,975	-	(D)	-	-	-	-
Capital expenditures.....do....	498	46	33	(D)	419	-	(D)	-	-	-	-

See footnotes at end of table.

TABLE 3. Selected Statistics by Employment Size of Establishment: 1963—Continued

Industry and item	All establishments, total	Establishments with an average of--									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1498.—FEAT INDUSTRY											
Establishments.....number..	109	84	12	9	2	2	-	-	-	-	-
All employees:											
Total.....do....	504	116	84	<u>304</u>	(D)	(D)	-	-	-	-	-
Payroll.....\$1,000..	1,778	373	264	<u>1,141</u>	(D)	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	442	114	70	<u>258</u>	(D)	(D)	-	-	-	-	-
Man-hours.....1,000..	948	251	149	<u>548</u>	(D)	(D)	-	-	-	-	-
Wages.....\$1,000..	1,473	361	221	<u>891</u>	(D)	(D)	-	-	-	-	-
Value added in mining.....do....	5,626	1,076	642	<u>3,908</u>	(D)	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	7,360	1,261	767	<u>5,332</u>	(D)	(D)	-	-	-	-	-
Capital expenditures.....do....	870	375	111	<u>384</u>	(D)	(D)	-	-	-	-	-
1499.—NONMETALLIC MINERALS, N.E.C., INDUSTRY											
Establishments.....number..	87	47	14	8	11	2	4	-	1	-	-
All employees:											
Total.....do....	<sup>1</sup> 11,878	71	95	104	<u>495</u>	(D)	<u>1,108</u>	-	(D)	-	-
Payroll.....\$1,000..	<sup>1</sup> 11,201	278	355	565	<u>2,712</u>	(D)	<u>7,257</u>	-	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	1,578	68	83	92	<u>433</u>	(D)	<u>902</u>	-	(D)	-	-
Man-hours.....1,000..	3,324	12 <sup>9</sup>	167	185	<u>957</u>	(D)	<u>1,886</u>	-	(D)	-	-
Wages.....\$1,000..	8,961	244	312	474	<u>2,160</u>	(D)	<u>5,771</u>	-	(D)	-	-
Value added in mining.....do....	32,619	748	698	1,740	<u>7,477</u>	(D)	<u>21,956</u>	-	(D)	-	-
Value of shipments and receipts.....do....	42,963	961	1,100	1,677	<u>10,343</u>	(D)	<u>28,882</u>	-	(D)	-	-
Capital expenditures.....do....	5,511	220	259	1,571	<u>1,635</u>	(D)	<u>1,826</u>	-	(D)	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.  
 (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Includes data for separately reported central offices and related facilities which, in part, were not distributed by size of establishment.

<sup>2</sup>Not shown since the cost of supplies, minerals received for treatment, fuels, purchased electric energy, contract work, and purchased machinery installed exceeded value of shipments and receipts and capital expenditures.

<sup>3</sup>Not shown to avoid disclosure of figures for individual companies.



# Type of Organization

Chapter 3

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# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963

Industry code, major industry group, industry, and item	Establishments, total	Type of company organization <sup>1</sup>					
		Multi-unit			Single unit		
		Total	Corporate ownership or control	Noncorporate ownership	Total	Corporate ownership or control	Noncorporate ownership
<u>ALL MINERAL INDUSTRIES, TOTAL:</u>							
1963							
Establishments <sup>2</sup> .....number..	67,399	25,104	20,637	4,467	42,295	14,548	27,747
With 20 or more employees.....do..	5,670	3,443	3,258	185	2,227	1,061	566
All employees:							
Number.....	615,572	412,780	395,169	17,611	202,792	118,518	84,274
Payroll.....\$1,000..	3,742,469	2,831,626	2,743,918	87,708	910,843	599,734	311,109
Production, development, and exploration workers:							
Number.....	481,466	304,753	290,247	14,506	176,713	102,757	73,956
Man-hours.....1,000..	972,983	631,430	602,716	28,714	341,553	204,122	137,431
Wages.....\$1,000..	2,679,515	1,906,355	1,836,931	69,424	773,140	500,108	273,052
Value added in mining.....do..	15,910,015	13,234,775	12,744,466	488,309	2,475,240	1,411,510	1,283,725
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	7,850,499	6,637,471	6,450,272	187,199	1,213,028	71,932	541,096
Purchased machinery installed.....do..	1,123,639	856,283	823,885	32,398	267,356	157,871	109,485
Value of shipments and receipts.....do..	21,620,538	17,943,841	17,332,576	611,265	3,676,697	1,999,530	1,677,161
Capital expenditures.....do..	3,263,615	2,784,688	2,688,047	96,641	478,927	241,782	237,145
1958 <sup>3</sup>							
All employees:							
Number.....	732,632	502,657	474,797	27,860	229,975	117,747	112,228
Payroll.....\$1,000..	3,740,288	2,823,260	2,696,264	126,996	917,028	533,910	383,112
Production, development, and exploration workers:							
Number.....	564,281	363,787	340,446	23,341	200,494	99,787	100,707
Man-hours.....1,000..	1,077,864	703,170	658,583	44,587	374,694	194,887	179,807
Wages.....\$1,000..	2,616,273	1,853,690	1,752,511	101,179	762,583	425,589	336,994
Value added in mining.....do..	13,381,494	11,004,238	10,515,707	488,531	2,377,256	1,250,199	1,127,057
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	6,490,893	5,294,992	5,042,738	252,254	1,195,901	640,247	555,654
Purchased machinery installed.....do..	1,015,257	778,749	722,761	55,988	236,508	133,354	103,154
Value of shipments and receipts.....do..	18,089,834	14,714,946	14,039,750	675,196	3,374,888	1,794,250	1,580,638
Capital expenditures.....do..	2,797,810	2,363,033	2,241,456	121,577	434,777	229,550	205,227
1954 <sup>3</sup>							
All employees:							
Number.....	785,708	530,258	497,028	33,230	255,450	131,707	123,743
Value added in mining.....\$1,000..	11,546,418	9,115,557	8,672,801	442,756	2,430,861	1,300,206	1,130,595
<u>10--METAL MINING:</u>							
1963							
Establishments <sup>2</sup> .....number..	1,824	609	580	29	1,215	424	791
With 20 or more employees.....do..	314	258	252	6	56	44	12
All employees:							
Number.....	77,210	71,282	70,263	1,019	5,928	4,053	1,875
Payroll.....\$1,000..	515,207	484,092	476,705	7,387	31,115	22,805	8,310
Production, development, and exploration workers:							
Number.....	62,182	57,168	56,341	827	5,014	3,413	1,601
Man-hours.....1,000..	125,663	115,444	113,563	1,881	10,219	7,054	3,165
Wages.....\$1,000..	383,671	358,536	352,515	6,021	25,135	18,043	7,092
Value added in mining.....do..	1,418,217	1,358,889	1,329,613	29,276	59,328	34,134	25,194
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	844,493	791,963	777,478	14,485	52,530	43,119	9,411
Purchased machinery installed.....do..	96,480	84,722	84,146	576	11,758	10,035	1,723
Value of shipments and receipts.....do..	2,128,246	2,031,082	1,987,368	43,714	97,164	66,794	30,370
Capital expenditures.....do..	230,944	204,492	203,869	623	26,452	20,494	5,958
1958 <sup>3</sup>							
All employees:							
Number.....	92,501	83,583	83,152	431	8,918	6,163	2,755
Payroll.....\$1,000..	487,786	446,805	444,783	2,022	40,981	29,476	11,505
Production, development, and exploration workers:							
Number.....	71,402	63,781	63,389	392	7,621	5,132	2,489
Man-hours.....1,000..	136,750	121,732	120,913	819	15,018	10,270	4,748
Wages.....\$1,000..	356,209	322,047	320,176	1,871	34,162	24,057	10,105
Value added in mining.....do..	1,187,327	1,070,157	1,064,013	6,144	117,170	79,704	37,466
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	793,278	721,234	718,971	2,263	72,044	41,738	30,306

See footnotes at end of table.

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Type of ownership or control <sup>1</sup>				
	Corporate	Noncorporate			
		Total	Individual	Partnership	Cooperative and other
<u>ALL MINERAL INDUSTRIES, TOTAL</u>					
1963					
Establishments <sup>2</sup> .....number..	35,185	32,214	19,608	11,436	1,170
With 20 or more employees.....do..	4,919	751	348	376	27
All employees:					
Number.....	513,687	101,885	58,206	40,581	3,098
Payroll.....\$1,000..	3,343,652	398,817	216,943	167,226	14,648
Production, development, and exploration workers:					
Number.....	393,004	88,462	50,374	35,522	2,566
Man-hours.....1,000..	806,838	166,145	92,213	68,702	5,230
Wages.....\$1,000..	2,337,039	342,476	185,563	144,931	11,982
Value added in mining.....do..	14,157,981	1,752,034	910,793	742,142	99,099
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	7,122,204	728,295	357,696	329,537	41,062
Purchased machinery installed.....do..	981,756	141,883	79,607	54,279	7,997
Value of shipments and receipts.....do..	19,332,112	2,288,426	1,172,573	984,583	131,270
Capital expenditures.....do..	2,929,829	333,786	175,523	141,375	16,888
1958 <sup>3</sup>					
All employees:					
Number.....	592,544	140,088	65,100	64,307	10,681
Payroll.....\$1,000..	3,230,180	510,108	221,629	239,876	48,603
Production, development, and exploration workers:					
Number.....	440,233	124,048	57,842	57,206	9,000
Man-hours.....1,000..	853,470	224,394	103,646	105,835	14,913
Wages.....\$1,000..	2,178,100	438,173	191,531	208,040	38,602
Value added in mining.....do..	11,765,906	1,615,588	695,633	730,733	189,222
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	5,682,985	807,908	348,320	367,224	92,364
Purchased machinery installed.....do..	856,115	159,142	66,264	74,508	18,370
Value of shipments and receipts.....do..	15,834,000	2,255,834	971,392	1,022,863	261,579
Capital expenditures.....do..	2,471,006	326,804	138,825	149,602	38,377
1954 <sup>3</sup>					
All employees:					
Number.....	628,735	156,973	70,899	77,599	8,475
Value added in mining.....\$1,000..	9,973,067	1,573,351	621,980	831,633	119,738
<u>10--METAL MINING:</u>					
1963					
Establishments <sup>2</sup> .....number..	1,004	820	489	318	13
With 20 or more employees.....do..	296	18	3	13	2
All employees:					
Number.....	74,316	2,894	965	1,846	83
Payroll.....\$1,000..	499,510	15,697	3,800	11,410	487
Production, development, and exploration workers:					
Number.....	59,754	2,428	834	1,515	79
Man-hours.....1,000..	120,617	5,046	1,636	3,329	81
Wages.....\$1,000..	370,558	13,113	3,392	9,257	464
Value added in mining.....do..	1,363,747	54,470	8,522	43,390	2,558
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	820,597	23,896	4,149	18,969	778
Purchased machinery installed.....do..	94,181	2,299	1,055	1,217	27
Value of shipments and receipts.....do..	2,054,162	74,084	10,611	60,212	3,261
Capital expenditures.....do..	224,363	6,581	3,115	3,364	102
1958 <sup>3</sup>					
All employees:					
Number.....	89,315	3,186	1,236	1,901	49
Payroll.....\$1,000..	474,259	13,527	4,704	8,616	207
Production, development, and exploration workers:					
Number.....	68,521	2,881	1,160	1,672	49
Man-hours.....1,000..	131,183	5,567	2,157	3,327	83
Wages.....\$1,000..	344,233	11,976	4,517	7,254	205
Value added in mining.....do..	1,143,717	43,610	11,059	32,158	393
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	760,709	32,569	5,388	26,990	191

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Establishments, total	Type of company organization <sup>1</sup>					
		Multi-unit			Single unit		
		Total	Corporate ownership or control	Noncorporate ownership	Total	Corporate ownership or control	Noncorporate ownership
10--METAL MINING: 1958--Continued							
Purchased machinery installed.....\$1,000..	69,531	61,216	61,111	105	8,315	5,929	2,386
Value of shipments and receipts.....do..	1,835,845	1,681,097	1,673,085	8,012	154,748	108,965	45,783
Capital expenditures.....do..	214,291	171,510	171,010	500	42,781	18,406	24,375
1954 <sup>3</sup>							
All employees:							
Number.....	100,250	88,968	88,156	812	11,282	8,470	2,812
Value added in mining.....\$1,000..	1,075,519	998,938	990,528	8,410	76,581	57,507	19,074
INDUSTRIES: 1963							
1011--Iron ores:							
Establishments.....number..	208	129	127	2	79	43	36
With 20 or more employees.....do..	101	91	90	1	10	8	2
All employees:							
Number.....	23,083	21,864	(D)	(D)	1,219	(D)	(D)
Payroll.....\$1,000..	161,571	155,049	(D)	(D)	6,522	(D)	(D)
Value added in mining.....do..	549,305	546,749	(D)	(D)	2,556	(D)	(D)
Value of shipments and receipts.....do..	762,234	740,145	(D)	(D)	22,089	(D)	(D)
Capital expenditures.....do..	96,644	84,933	(D)	(D)	11,711	(D)	(D)
1021--Copper ores:							
Establishments.....number..	160	61	56	5	99	37	62
With 20 or more employees.....do..	41	36	36	-	5	3	2
All employees:							
Number.....	26,486	25,776	25,748	28	710	530	180
Payroll.....\$1,000..	187,307	183,547	183,460	87	3,760	3,076	684
Value added in mining.....do..	417,089	408,363	408,206	157	8,726	7,609	1,117
Value of shipments and receipts.....do..	670,173	657,529	657,291	238	12,644	11,253	1,391
Capital expenditures.....do..	87,078	85,681	85,667	14	1,397	980	417
1031--Lead and zinc ores:							
Establishments.....number..	206	65	62	3	141	64	77
With 20 or more employees.....do..	47	41	39	2	6	4	2
All employees:							
Number.....	9,422	8,875	8,737	138	547	324	223
Payroll.....\$1,000..	49,337	47,071	46,388	683	2,266	1,435	831
Value added in mining.....do..	84,373	78,679	77,995	684	5,694	3,467	2,227
Value of shipments and receipts.....do..	135,965	128,305	126,298	2,007	7,660	4,740	2,920
Capital expenditures.....do..	11,896	9,277	9,200	77	2,619	2,101	518
Lead ores:							
Establishments.....number..	126	21	20	1	105	43	62
With 20 or more employees.....do..	14	11	11	-	3	2	1
All employees:							
Number.....	4,320	4,004	(D)	(D)	316	(D)	(D)
Payroll.....\$1,000..	21,892	20,803	(D)	(D)	1,089	(D)	(D)
Value added in mining.....do..	34,046	31,844	(D)	(D)	2,202	(D)	(D)
Value of shipments and receipts.....do..	50,743	48,243	(D)	(D)	2,500	(D)	(D)
Capital expenditures.....do..	6,108	5,219	(D)	(D)	889	(D)	(D)
Zinc ores:							
Establishments.....number..	80	44	42	2	36	21	15
With 20 or more employees.....do..	33	30	28	2	3	2	1
All employees:							
Number.....	5,102	4,871	(D)	(D)	231	(D)	(D)
Payroll.....\$1,000..	27,445	26,268	(D)	(D)	1,177	(D)	(D)
Value added in mining.....do..	50,327	46,835	(D)	(D)	3,492	(D)	(D)
Value of shipments and receipts.....do..	85,222	80,062	(D)	(D)	5,160	(D)	(D)
Capital expenditures.....do..	5,788	4,058	(D)	(D)	1,730	(D)	(D)
1042--Iode gold:							
Establishments.....number..	201	8	7	1	193	78	115
With 20 or more employees.....do..	5	2	2	-	3	2	1
All employees:							
Number.....	2,397	1,933	(D)	(D)	464	(D)	(D)
Payroll.....\$1,000..	13,861	11,542	(D)	(D)	2,319	(D)	(D)
Value added in mining.....do..	21,312	17,379	(D)	(D)	3,933	(D)	(D)
Value of shipments and receipts.....do..	26,632	22,311	(D)	(D)	4,321	(D)	(D)
Capital expenditures.....do..	2,859	1,255	(D)	(D)	1,604	(D)	(D)

See footnotes at end of table.

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Type of ownership or control <sup>1</sup>				
	Corporate	Noncorporate			
		Total	Individual	Partnership	Cooperative and other
10--METAL MINING: 1958--Continued					
Purchased machinery installed.....\$1,000..	67,040	2,491	1,221	1,241	29
Value of shipments and receipts.....do..	1,782,050	53,795	14,662	38,699	434
Capital expenditures.....do..	189,416	24,875	3,006	21,690	179
1954 <sup>3</sup>					
All employees:					
Number.....	96,626	3,624	1,416	2,150	58
Value added in mining.....\$1,000..	1,048,035	27,484	8,560	18,799	125
INDUSTRIES: 1963					
1011--Iron ores:					
Establishments.....number..	170	38	19	18	1
With 20 or more employees.....do..	98	3	1	2	-
All employees:					
Number.....	22,866	217	124	(D)	(D)
Payroll.....\$1,000..	160,740	831	420	(D)	(D)
Value added in mining.....do..	545,441	3,864	1,122	(D)	(D)
Value of shipments and receipts.....do..	757,128	5,106	1,472	(D)	(D)
Capital expenditures.....do..	96,310	334	222	(D)	(D)
1021--Copper ores:					
Establishments.....number..	93	67	31	35	1
With 20 or more employees.....do..	39	2	-	2	-
All employees:					
Number.....	26,278	208	47	(D)	(D)
Payroll.....\$1,000..	186,536	771	189	(D)	(D)
Value added in mining.....do..	415,815	1,274	257	(D)	(D)
Value of shipments and receipts.....do..	668,544	1,629	159	(D)	(D)
Capital expenditures.....do..	86,647	431	223	(D)	(D)
1031--Lead and zinc ores:					
Establishments.....number..	126	80	48	29	3
With 20 or more employees.....do..	43	4	-	3	1
All employees:					
Number.....	9,061	361	134	190	37
Payroll.....\$1,000..	47,823	1,514	482	886	146
Value added in mining.....do..	81,462	2,911	1,259	1,406	246
Value of shipments and receipts.....do..	131,038	4,927	1,482	3,141	304
Capital expenditures.....do..	11,301	595	369	226	-
Lead ores:					
Establishments.....number..	63	63	41	19	3
With 20 or more employees.....do..	13	1	-	-	1
All employees:					
Number.....	4,191	129	81	11	37
Payroll.....\$1,000..	21,412	480	283	51	146
Value added in mining.....do..	32,727	1,319	687	386	246
Value of shipments and receipts.....do..	49,262	1,481	768	409	304
Capital expenditures.....do..	5,639	469	347	122	-
Zinc ores:					
Establishments.....number..	63	17	7	10	-
With 20 or more employees.....do..	30	3	-	3	-
All employees:					
Number.....	4,870	232	53	179	-
Payroll.....\$1,000..	26,411	1,034	199	835	-
Value added in mining.....do..	48,735	1,592	572	1,020	-
Value of shipments and receipts.....do..	81,776	3,446	714	2,732	-
Capital expenditures.....do..	5,662	126	22	104	-
1042--Lode gold:					
Establishments.....number..	85	116	67	46	3
With 20 or more employees.....do..	4	1	-	-	1
All employees:					
Number.....	2,226	171	91	36	44
Payroll.....\$1,000..	13,043	818	356	143	319
Value added in mining.....do..	20,154	1,158	324	108	726
Value of shipments and receipts.....do..	25,355	1,277	324	49	904
Capital expenditures.....do..	2,094	765	447	232	86

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Establishments, total	Type of company organization <sup>1</sup>					
		Multi-unit			Single unit		
		Total	Corporate ownership or control	Noncorporate ownership	Total	Corporate ownership or control	Noncorporate ownership
INDUSTRIES: 1963—Continued							
1043—Placer gold:							
Establishments.....number..	158	5	5	-	153	23	130
With 20 or more employees.....do..	2	2	2	-	-	-	-
All employees:							
Number.....	361	220	220	-	141	41	100
Payroll.....\$1,000..	2,134	1,597	1,597	-	537	216	321
Value added in mining.....do..	5,810	4,915	4,915	-	895	243	652
Value of shipments and receipts.....do..	7,532	6,371	6,371	-	1,161	351	810
Capital expenditures.....do..	989	127	127	-	862	273	589
1044—Silver ores:							
Establishments.....number..	107	11	10	1	96	39	57
With 20 or more employees.....do..	8	6	6	-	2	2	-
All employees:							
Number.....	1,458	1,206	(D)	(D)	252	(D)	(D)
Payroll.....\$1,000..	8,802	7,775	(D)	(D)	1,027	(D)	(D)
Value added in mining.....do..	21,904	20,098	(D)	(D)	1,806	(D)	(D)
Value of shipments and receipts.....do..	26,060	24,259	(D)	(D)	1,801	(D)	(D)
Capital expenditures.....do..	3,338	1,890	(D)	(D)	1,448	(D)	(D)
1051—Bauxite:							
Establishments.....number..	17	13	13	-	4	-	4
With 20 or more employees.....do..	4	4	4	-	-	-	-
All employees:							
Number.....	552	524	524	-	28	-	28
Payroll.....\$1,000..	3,442	3,341	3,341	-	101	-	101
Value added in mining.....do..	17,464	17,233	17,233	-	231	-	231
Value of shipments and receipts.....do..	21,491	20,845	20,845	-	646	-	646
Capital expenditures.....do..	269	264	264	-	5	-	5
1062—Manganese ores:							
Establishments.....number..	17	6	6	-	11	4	7
With 20 or more employees.....do..	5	3	3	-	2	1	1
All employees:							
Number.....	224	123	123	-	101	58	43
Payroll.....\$1,000..	1,138	739	739	-	399	256	143
Value added in mining.....do..	2,348	1,574	1,574	-	774	435	339
Value of shipments and receipts.....do..	7,228	6,121	6,121	-	1,107	706	401
Capital expenditures.....do..	386	251	251	-	135	38	97
1064 and 1069—Tungsten ores and ferroalloy ores, n.e.c.:							
Establishments.....number..	41	16	15	1	25	7	18
With 20 or more employees.....do..	6	5	5	-	1	1	-
All employees:							
Number.....	2,878	2,762	(D)	(D)	116	(D)	(D)
Payroll.....\$1,000..	19,227	18,668	(D)	(D)	559	(D)	(D)
Value added in mining.....do..	64,059	63,721	(D)	(D)	338	(D)	(D)
Value of shipments and receipts.....do..	83,476	83,076	(D)	(D)	400	(D)	(D)
Capital expenditures.....do..	5,445	5,178	(D)	(D)	267	(D)	(D)
1081—Metal mining services:							
Establishments.....number..	292	180	180	-	112	50	62
With 20 or more employees.....do..	32	14	14	-	18	17	1
All employees:							
Number.....	2,206	1,070	1,070	-	1,136	969	167
Payroll.....\$1,000..	13,923	6,966	6,966	-	6,957	6,397	560
Value added in mining.....do..	24,736	12,940	12,940	-	11,796	10,303	1,493
Value of shipments and receipts.....do..	32,360	16,982	16,982	-	15,378	13,497	1,881
Capital expenditures.....do..	3,039	679	679	-	2,360	2,216	144
1092—Mercury ores:							
Establishments.....number..	49	4	3	1	45	17	28
With 20 or more employees.....do..	3	2	2	-	1	-	1
All employees:							
Number.....	316	222	(D)	(D)	94	(D)	(D)
Payroll.....\$1,000..	1,839	1,384	(D)	(D)	455	(D)	(D)
Value added in mining.....do..	2,569	1,641	(D)	(D)	928	(D)	(D)
Value of shipments and receipts.....do..	3,658	2,535	(D)	(D)	1,123	(D)	(D)
Capital expenditures.....do..	317	55	(D)	(D)	262	(D)	(D)
1093—Titanium ores:							
Establishments.....number..	8	6	6	-	2	2	-
With 20 or more employees.....do..	7	6	6	-	1	1	-
All employees:							
Number.....	997	(D)	(D)	-	(D)	(D)	-
Payroll.....\$1,000..	6,401	(D)	(D)	-	(D)	(D)	-
Value added in mining.....do..	15,021	(D)	(D)	-	(D)	(D)	-
Value of shipments and receipts.....do..	22,033	(D)	(D)	-	(D)	(D)	-
Capital expenditures.....do..	2,171	(D)	(D)	-	(D)	(D)	-

See footnotes at end of table.

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Type of ownership or control <sup>1</sup>				
	Corporate	Noncorporate			
		Total	Individual	Partnership	Cooperative and other
INDUSTRIES: 1963—Continued					
1043—Placer gold:					
Establishments.....number..	28	130	87	42	1
With 20 or more employees.....do..	2	-	-	-	-
All employees:					
Number.....	261	100	64	(D)	(D)
Payroll.....\$1,000..	1,813	321	230	(D)	(D)
Value added in mining.....do..	5,158	652	333	(D)	(D)
Value of shipments and receipts.....do..	6,722	810	389	(D)	(D)
Capital expenditures.....do..	400	589	515	(D)	(D)
1044—Silver ores:					
Establishments.....number..	49	58	23	35	-
With 20 or more employees.....do..	8	-	-	-	-
All employees:					
Number.....	1,401	57	22	35	-
Payroll.....\$1,000..	8,654	148	74	74	-
Value added in mining.....do..	21,506	398	212	186	-
Value of shipments and receipts.....do..	25,630	430	184	246	-
Capital expenditures.....do..	3,045	293	155	138	-
1051—Bauxite:					
Establishments.....number..	13	4	1	3	-
With 20 or more employees.....do..	4	-	-	-	-
All employees:					
Number.....	524	28	(D)	(D)	-
Payroll.....\$1,000..	3,341	101	(D)	(D)	-
Value added in mining.....do..	17,233	231	(D)	(D)	-
Value of shipments and receipts.....do..	20,845	646	(D)	(D)	-
Capital expenditures.....do..	264	5	(D)	(D)	-
1062—Manganese ores:					
Establishments.....number..	10	7	5	2	-
With 20 or more employees.....do..	4	1	1	-	-
All employees:					
Number.....	181	43	(D)	(D)	-
Payroll.....\$1,000..	995	143	(D)	(D)	-
Value added in mining.....do..	2,009	339	(D)	(D)	-
Value of shipments and receipts.....do..	6,827	401	(D)	(D)	-
Capital expenditures.....do..	289	97	(D)	(D)	-
1064—Tungsten ores and ferroalloy ores, n.e.c.:					
Establishments.....number..	22	19	14	4	1
With 20 or more employees.....do..	6	-	-	-	-
All employees:					
Number.....	2,831	47	43	(D)	(D)
Payroll.....\$1,000..	19,029	198	186	(D)	(D)
Value added in mining.....do..	64,023	36	36	(D)	(D)
Value of shipments and receipts.....do..	83,393	83	79	(D)	(D)
Capital expenditures.....do..	5,355	90	85	(D)	(D)
1081—Metal mining services:					
Establishments <sup>2</sup> .....number..	230	62	57	5	-
With 20 or more employees.....do..	31	1	-	1	-
All employees:					
Number.....	2,139	167	130	37	-
Payroll.....\$1,000..	13,363	560	459	101	-
Value added in mining.....do..	23,243	1,493	1,171	322	-
Value of shipments and receipts.....do..	30,479	1,881	1,418	463	-
Capital expenditures.....do..	2,895	144	102	42	-
1092—Mercury ores:					
Establishments.....number..	20	29	21	8	-
With 20 or more employees.....do..	2	1	1	-	-
All employees:					
Number.....	260	56	51	5	-
Payroll.....\$1,000..	1,548	291	282	9	-
Value added in mining.....do..	1,884	685	673	12	-
Value of shipments and receipts.....do..	2,778	890	876	14	-
Capital expenditures.....do..	192	125	114	11	-
1093—Titanium ores:					
Establishments.....number..	8	-	-	-	-
With 20 or more employees.....do..	7	-	-	-	-
All employees:					
Number.....	997	-	-	-	-
Payroll.....\$1,000..	6,401	-	-	-	-
Value added in mining.....do..	15,021	-	-	-	-
Value of shipments and receipts.....do..	22,033	-	-	-	-
Capital expenditures.....do..	2,171	-	-	-	-

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Establishments, total	Type of company organization <sup>1</sup>					
		Multi-unit			Single unit		
		Total	Corporate ownership or control	Noncorporate ownership	Total	Corporate ownership or control	Noncorporate ownership
INDUSTRIES: 1963—Continued							
1094—Uranium-radium-vanadium ores:							
Establishments.....number..	335	102	87	15	233	53	180
With 20 or more employees.....do..	51	46	43	3	5	3	2
All employees:							
Number.....	6,665	5,700	4,899	801	965	336	629
Payroll.....\$1,000..	45,219	39,829	33,401	6,428	5,390	1,862	3,528
Value added in mining.....do..	190,629	170,368	143,841	26,527	20,261	5,419	14,842
Value of shipments and receipts.....do..	326,370	300,024	261,120	38,904	26,346	9,336	17,010
Capital expenditures.....do..	15,929	12,511	12,073	438	3,418	782	2,636
1099—Metallic ores, n.e.c.:							
Establishments.....number..	25	3	3	-	22	7	15
With 20 or more employees.....do..	2	-	-	-	2	2	-
All employees:							
Number.....	165	(D)	(D)	-	(D)	(D)	9
Payroll.....\$1,000..	1,006	(D)	(D)	-	(D)	(D)	45
Value added in mining.....do..	1,598	(D)	(D)	-	(D)	(D)	60
Value of shipments and receipts.....do..	3,034	(D)	(D)	-	(D)	(D)	90
Capital expenditures.....do..	584	(D)	(D)	-	(D)	(D)	39
11--ANTHRACITE MINING:							
1963							
Establishments <sup>2</sup> .....number..	1,080	67	58	9	1,013	168	845
With 20 or more employees.....do..	104	39	38	1	65	55	10
All employees:							
Number.....	11,786	5,566	5,449	117	6,220	4,014	2,206
Payroll.....\$1,000..	58,835	31,527	30,927	600	27,308	18,829	8,479
Production, development, and exploration workers:							
Number.....	10,325	4,682	4,568	114	5,643	3,599	2,044
Man-hours.....\$1,000..	19,544	9,362	9,130	232	10,182	6,540	3,642
Wages.....\$1,000..	49,890	25,347	24,762	585	24,543	16,513	8,030
Value added in mining.....do..	120,540	62,176	60,786	1,390	58,364	33,022	25,342
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	122,024	67,829	67,210	619	54,195	33,820	20,375
Purchased machinery installed.....do..	9,058	4,962	4,119	843	4,096	2,702	1,394
Value of shipments and receipts.....do..	236,511	126,117	124,102	2,015	110,394	65,675	44,719
Capital expenditures.....do..	15,111	8,850	8,013	837	6,261	3,869	2,392
1958							
All employees:							
Number.....	22,813	13,054	12,606	448	9,759	6,268	3,491
Payroll.....\$1,000..	93,396	56,108	54,254	1,854	37,288	24,953	12,335
Production, development, and exploration workers:							
Number.....	20,047	11,295	10,865	430	8,752	5,545	3,207
Man-hours.....\$1,000..	30,867	17,326	16,628	698	13,541	8,368	5,173
Wages.....\$1,000..	79,425	46,247	44,518	1,729	33,178	21,794	11,384
Value added in mining.....do..	164,489	98,722	96,314	2,408	65,767	39,323	26,444
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	167,197	122,341	120,694	1,647	44,856	26,379	18,477
Purchased machinery installed.....do..	10,033	4,265	4,047	218	5,768	3,986	1,782
Value of shipments and receipts.....do..	325,128	217,056	213,037	4,019	108,072	64,715	43,357
Capital expenditures.....do..	16,591	8,272	8,018	254	8,319	4,973	3,346
1954							
All employees:							
Number.....	37,462	26,830	25,172	1,658	10,632	6,961	3,671
Value added in mining.....\$1,000..	196,835	124,110	114,512	9,598	72,725	43,794	28,931
INDUSTRIES: 1963							
1111—Anthracite:							
Establishments.....number..	1,026	56	50	6	970	139	831
With 20 or more employees.....do..	85	32	32	-	53	44	9
All employees:							
Number.....	10,692	5,226	5,167	59	5,466	3,407	2,059
Payroll.....\$1,000..	53,022	29,503	29,218	285	23,519	15,803	7,716
Value added in mining.....do..	110,527	59,565	58,959	606	50,962	27,159	23,803
Value of shipments and receipts.....do..	220,973	121,372	120,294	1,078	99,601	57,489	42,112
Capital expenditures.....do..	12,651	7,927	7,652	275	4,724	2,588	2,136

See footnotes at end of table.

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Type of ownership or control <sup>1</sup>				
	Corporate	Noncorporate			
		Total	Individual	Partnership	Cooperative and other
INDUSTRIES: 1963—Continued					
1094—Uranium-radium-vanadium ores:					
Establishments.....number..	140	195	107	86	2
With 20 or more employees.....do..	46	5	-	5	-
All employees:					
Number.....	5,235	1,430	217	(D)	(D)
Payroll.....\$1,000..	35,263	9,956	962	(D)	(D)
Value added in mining.....do..	149,260	41,369	2,839	(D)	(D)
Value of shipments and receipts.....do..	270,456	55,914	3,923	(D)	(D)
Capital expenditures.....do..	12,855	3,074	766	(D)	(D)
1099—Metallic ores, n.e.c.:					
Establishments.....number..	10	15	9	5	1
With 20 or more employees.....do..	2	-	-	-	-
All employees:					
Number.....	156	9	4	(D)	(D)
Payroll.....\$1,000..	961	45	30	(D)	(D)
Value added in mining.....do..	1,538	60	34	(D)	(D)
Value of shipments and receipts.....do..	2,944	90	38	(D)	(D)
Capital expenditures.....do..	545	39	24	(D)	(D)
11--ANTHRACITE MINING:					
1963					
Establishments <sup>2</sup> .....number..	226	854	223	627	4
With 20 or more employees.....do..	93	11	6	5	-
All employees:					
Number.....	9,463	2,323	1,081	1,219	23
Payroll.....\$1,000..	49,756	9,079	4,099	4,849	131
Production, development, and exploration workers:					
Number.....	8,167	2,158	1,007	1,130	21
Man-hours.....1,000..	15,670	3,874	1,821	2,015	38
Wages.....\$1,000..	41,275	8,615	3,907	4,597	111
Value added in mining.....do..	93,808	26,732	9,033	17,480	219
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	101,030	20,994	7,230	13,344	420
Purchased machinery installed.....do..	6,821	2,237	1,167	1,019	51
Value of shipments and receipts.....do..	189,777	46,734	15,847	30,217	670
Capital expenditures.....do..	11,882	3,229	1,583	1,626	20
1958					
All employees:					
Number.....	18,874	3,939	1,479	2,449	11
Payroll.....\$1,000..	79,207	14,189	5,202	8,943	44
Production, development, and exploration workers:					
Number.....	16,410	3,637	1,364	2,264	9
Man-hours.....1,000..	24,996	5,871	2,214	3,639	18
Wages.....\$1,000..	66,312	13,113	4,818	8,267	28
Value added in mining.....do..	135,637	28,852	10,361	18,278	213
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	147,073	20,124	7,989	11,883	252
Purchased machinery installed.....do..	8,033	2,000	592	1,383	25
Value of shipments and receipts.....do..	277,752	47,376	17,691	29,216	469
Capital expenditures.....do..	12,991	3,600	1,251	2,328	21
1954					
All employees:					
Number.....	32,133	5,329	2,767	2,562	-
Value added in mining.....\$1,000..	158,306	38,529	13,876	24,653	-
INDUSTRIES: 1963					
1111—Anthracite:					
Establishments.....number..	189	837	212	623	2
With 20 or more employees.....do..	76	9	5	4	-
All employees:					
Number.....	8,574	2,118	961	(D)	(D)
Payroll.....\$1,000..	45,021	8,001	3,492	(D)	(D)
Value added in mining.....do..	86,118	24,409	7,749	(D)	(D)
Value of shipments and receipts.....do..	177,783	43,190	14,136	(D)	(D)
Capital expenditures.....do..	10,240	2,411	905	(D)	(D)



# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Establishments, total	Type of company organization <sup>1</sup>					
		Multi-unit			Single unit		
		Total	Corporate ownership or control	Noncorporate ownership	Total	Corporate ownership or control	Noncorporate ownership
INDUSTRIES: 1963—Continued							
1112—Anthracite mining services:							
Establishments <sup>2</sup> .....number..	54	11	8	3	43	29	14
With 20 or more employees.....do..	19	7	6	1	12	11	1
All employees:							
Number.....	1,094	340	282	58	754	607	147
Payroll.....\$1,000..	5,813	2,024	1,709	315	3,789	3,026	763
Value added in mining.....do..	10,013	2,611	1,827	784	7,402	5,863	1,539
Value of shipments and receipts.....do..	15,538	4,745	3,808	937	10,793	8,186	2,607
Capital expenditures.....do..	2,460	923	361	562	1,537	1,281	256
12--BITUMINOUS COAL AND LIGNITE MINING:							
1963							
Establishments <sup>2</sup> .....number..	6,338	783	695	88	5,555	1,404	4,151
With 20 or more employees.....do..	1,182	525	502	23	657	426	231
All employees:							
Number.....	133,862	83,803	82,290	1,513	50,059	25,703	24,356
Payroll.....\$1,000..	762,263	565,400	558,685	6,715	196,863	118,917	77,946
Production, development, and exploration workers:							
Number.....	118,629	72,353	70,910	1,443	46,276	23,663	22,613
Man-hours.....1,000..	217,642	139,411	136,743	2,668	78,231	41,913	36,318
Wages.....\$1,000..	650,955	468,758	462,460	6,298	182,197	108,805	73,392
Value added in mining.....do..	1,606,688	1,176,239	1,160,673	15,566	430,449	255,713	174,736
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	810,211	594,854	586,816	8,038	215,357	147,976	67,381
Purchased machinery installed.....do..	197,860	159,253	157,431	1,822	38,607	22,910	15,697
Value of shipments and receipts.....do..	2,396,419	1,767,695	1,744,785	22,910	628,724	393,538	235,186
Capital expenditures.....do..	218,340	162,651	160,135	2,516	55,689	33,061	22,628
1958 <sup>3</sup>							
All employees:							
Number.....	187,706	130,322	121,145	9,177	57,384	25,104	32,280
Payroll.....\$1,000..	912,784	711,379	668,108	43,271	201,405	107,548	93,857
Production, development, and exploration workers:							
Number.....	163,533	111,767	103,723	8,044	51,766	22,506	29,260
Man-hours.....1,000..	267,699	186,632	173,144	13,488	81,067	37,286	43,781
Wages.....\$1,000..	760,364	579,487	542,393	37,094	180,877	94,821	86,056
Value added in mining.....do..	1,609,964	1,243,385	1,166,066	77,319	366,579	187,385	179,194
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	849,637	629,950	599,479	30,471	219,687	130,152	89,535
Purchased machinery installed.....do..	151,955	125,332	115,126	10,206	26,623	15,025	11,598
Value of shipments and receipts.....do..	2,423,361	1,852,744	1,742,498	110,246	570,617	310,465	260,152
Capital expenditures.....do..	188,195	145,923	138,173	7,750	42,272	22,097	20,175
1954 <sup>3</sup>							
All employees:							
Number.....	218,833	160,124	149,726	10,398	58,709	30,812	27,897
Value added in mining.....\$1,000..	1,418,384	1,081,678	1,018,579	63,099	336,706	200,666	136,040
INDUSTRIES: 1963							
1211—Bituminous coal:							
Establishments.....number..	6,112	750	669	81	5,362	1,344	4,018
With 20 or more employees.....do..	1,163	519	496	23	644	414	230
All employees:							
Number.....	132,046	83,151	81,701	1,450	48,895	24,934	23,961
Payroll.....\$1,000..	752,491	561,734	555,360	6,374	190,757	114,533	76,224
Value added in mining.....do..	1,578,078	1,161,717	1,147,132	14,585	416,361	246,090	170,271
Value of shipments and receipts.....do..	2,358,326	1,749,896	1,728,208	21,688	608,430	379,595	228,835
Capital expenditures.....do..	210,835	158,292	155,930	2,362	52,543	30,650	21,893
1212—Lignite:							
Establishments.....number..	59	14	14	-	45	6	39
With 20 or more employees.....do..	6	5	5	-	1	1	-
All employees:							
Number.....	512	383	383	-	129	78	51
Payroll.....\$1,000..	2,760	2,164	2,164	-	596	445	151
Value added in mining.....do..	11,830	10,616	10,616	-	1,214	802	412
Value of shipments and receipts.....do..	14,112	12,527	12,527	-	1,585	1,009	576
Capital expenditures.....do..	4,633	4,014	4,014	-	619	549	200

See footnotes at end of table.

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Type of ownership or control <sup>1</sup>				
	Corporate	Noncorporate			
		Total	Individual	Partnership	Cooperative and other
INDUSTRIES: 1963—Continued					
1112—Anthracite mining services:					
Establishments <sup>2</sup> .....number..	37	17	11	4	2
With 20 or more employees.....do..	17	2	1	1	-
All employees:					
Number.....	889	205	120	(D)	(D)
Payroll.....\$1,000..	4,735	1,078	607	(D)	(D)
Value added in mining.....do..	7,690	2,323	1,284	(D)	(D)
Value of shipments and receipts.....do..	11,994	3,544	1,711	(D)	(D)
Capital expenditures.....do..	1,642	818	678	(D)	(D)
12--BITUMINOUS COAL AND LIGNITE MINING:					
1963					
Establishments <sup>2</sup> .....number..	2,099	4,239	2,789	1,425	25
With 20 or more employees.....do..	928	254	110	136	8
All employees:					
Number.....	107,993	25,869	14,755	10,784	330
Payroll.....\$1,000..	677,602	84,661	46,013	37,299	1,349
Production, development, and exploration workers:					
Number.....	94,573	24,056	13,667	10,099	290
Man-hours.....1,000..	178,656	38,986	21,065	17,387	534
Wages.....\$1,000..	571,265	79,690	43,257	35,205	1,228
Value added in mining.....do..	1,416,386	190,302	93,179	93,565	3,558
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	734,792	75,419	36,788	37,600	1,031
Purchased machinery installed.....do..	180,341	17,519	8,039	9,422	58
Value of shipments and receipts.....do..	2,138,323	258,096	126,214	127,641	4,241
Capital expenditures.....do..	193,196	25,144	11,792	12,946	406
1958 <sup>3</sup>					
All employees:					
Number.....	146,249	41,457	17,548	17,903	6,006
Payroll.....\$1,000..	775,656	137,128	52,094	56,042	28,992
Production, development, and exploration workers:					
Number.....	126,229	37,304	15,916	16,183	5,205
Man-hours.....1,000..	210,430	57,269	24,864	24,404	8,001
Wages.....\$1,000..	637,214	123,150	47,639	51,628	23,883
Value added in mining.....do..	1,353,451	256,513	94,359	114,856	47,298
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	729,631	120,006	51,898	55,463	12,645
Purchased machinery installed.....do..	130,151	21,804	6,658	8,140	7,006
Value of shipments and receipts.....do..	2,052,963	370,398	141,393	166,543	62,462
Capital expenditures.....do..	160,270	27,925	11,522	11,916	4,487
1954 <sup>3</sup>					
All employees:					
Number.....	180,538	38,295	16,394	15,991	5,910
Value added in mining.....\$1,000..	1,219,245	199,139	73,760	91,404	33,975
INDUSTRIES: 1963					
1211—Bituminous coal:					
Establishments.....number..	2,013	4,099	2,707	1,367	25
With 20 or more employees.....do..	910	253	110	135	8
All employees:					
Number.....	106,635	25,411	14,512	10,569	330
Payroll.....\$1,000..	669,893	82,598	44,957	36,292	1,349
Value added in mining.....do..	1,393,222	184,856	90,587	90,711	3,558
Value of shipments and receipts.....do..	2,107,803	250,523	123,055	123,227	4,241
Capital expenditures.....do..	186,580	24,255	11,488	12,361	406
1212—Lignite:					
Establishments.....number..	20	39	27	12	-
With 20 or more employees.....do..	6	-	-	-	-
All employees:					
Number.....	461	51	37	14	-
Payroll.....\$1,000..	2,609	151	128	23	-
Value added in mining.....do..	11,418	412	297	115	-
Value of shipments and receipts.....do..	13,536	576	415	161	-
Capital expenditures.....do..	4,563	70	27	43	-

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Establishments, total	Type of company organization <sup>1</sup>					
		Multi-unit			Single unit		
		Total	Corporate ownership or control	Noncorporate ownership	Total	Corporate ownership or control	Noncorporate ownership
INDUSTRIES: 1963—Continued <sup>2</sup>							
1213—Bituminous coal mining services:							
Establishments <sup>2</sup> .....number..	167	19	12	7	148	54	94
With 20 or more employees.....do..	13	1	1	-	12	11	1
All employees:							
Number.....	1,304	269	206	63	1,035	691	344
Payroll.....\$1,000..	7,012	1,502	1,161	341	5,510	3,939	1,571
Value added in mining.....do..	16,780	3,906	2,925	981	12,874	8,821	4,053
Value of shipments and receipts.....do..	23,981	5,272	4,050	1,222	18,709	12,934	5,775
Capital expenditures.....do..	2,872	345	191	154	2,527	1,862	665
13—OIL AND GAS EXTRACTION:							
1963							
Establishments <sup>2</sup> .....number..	49,700	21,573	17,453	4,120	28,127	9,949	18,178
With 20 or more employees.....do..	2,591	1,786	1,661	125	805	597	208
All employees:							
Number.....	271,476	181,082	168,145	12,937	90,394	50,095	40,299
Payroll.....\$1,000..	1,744,711	1,330,147	1,266,370	63,777	414,564	260,833	153,731
Production, development, and exploration workers:							
Number.....	191,976	114,835	104,424	10,411	77,141	43,103	34,038
Man-hours.....1,000..	397,348	244,512	224,354	20,158	152,836	87,068	65,768
Wages.....\$1,000..	1,093,048	748,081	699,525	48,556	344,967	215,654	129,313
Value added in mining.....do..	11,019,796	9,468,056	9,048,687	419,369	1,551,740	669,273	882,467
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	5,396,282	4,741,924	4,589,888	152,036	654,358	279,770	374,588
Purchased machinery installed.....do..	648,073	514,749	488,211	26,538	133,324	73,152	60,172
Value of shipments and receipts.....do..	14,512,459	12,460,933	11,948,888	512,045	2,051,526	907,893	1,143,633
Capital expenditures.....do..	2,551,692	2,263,796	2,177,898	85,898	287,896	114,302	173,594
1958 <sup>3</sup>							
All employees:							
Number.....	312,800	206,846	191,953	14,893	105,954	49,180	56,774
Payroll.....\$1,000..	1,699,420	1,261,783	1,193,541	68,242	437,637	233,173	204,464
Production, development, and exploration workers:							
Number.....	213,935	122,276	110,457	11,819	91,659	40,950	50,709
Man-hours.....1,000..	440,102	259,056	234,886	24,170	181,046	86,187	94,859
Wages.....\$1,000..	1,010,679	656,271	606,326	49,945	354,408	178,480	175,928
Value added in mining.....do..	9,035,289	7,691,682	7,318,746	372,936	1,343,607	622,276	721,331
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	4,137,101	3,462,057	3,255,321	206,736	675,044	321,561	353,483
Purchased machinery installed.....do..	654,232	512,870	470,413	42,457	141,362	71,212	70,150
Value of shipments and receipts.....do..	11,636,887	9,734,196	9,220,969	513,227	1,902,691	884,875	1,017,816
Capital expenditures.....do..	2,189,735	1,932,413	1,823,511	108,902	257,322	130,174	127,148
1954 <sup>3</sup>							
All employees:							
Number.....	315,735	187,064	171,572	15,492	128,671	59,305	69,366
Value added in mining.....\$1,000..	7,673,694	6,090,276	5,770,160	320,116	1,583,418	776,198	807,220
INDUSTRIES: 1963							
1311—Crude petroleum and natural gas:							
Establishments <sup>2</sup> .....number..	29,686	16,456	13,035	3,421	13,230	2,988	10,242
With 20 or more employees.....do..	1,068	965	911	54	103	64	39
All employees:							
Number.....	145,244	121,278	112,947	8,331	23,966	8,836	15,130
Payroll.....\$1,000..	1,016,431	917,679	877,285	40,394	98,752	44,244	54,508
Value added in mining.....do..	9,016,372	8,119,301	7,751,708	367,593	897,071	238,179	658,892
Value of shipments and receipts.....do..	9,893,763	8,761,991	8,335,238	426,753	1,131,772	293,029	838,743
Capital expenditures.....do..	2,209,930	2,019,641	1,944,725	74,916	190,289	47,397	142,892
Crude petroleum:							
Establishments <sup>2</sup> .....number..	25,318	13,681	10,671	3,010	11,637	2,571	9,066
With 20 or more employees.....do..	881	792	741	51	89	52	37
All employees:							
Number.....	125,842	104,569	96,897	7,672	21,273	7,419	13,854
Payroll.....\$1,000..	892,632	805,260	768,374	36,886	87,372	36,924	50,448
Value added in mining.....do..	7,812,956	7,069,885	6,739,968	329,917	743,071	190,071	553,000
Value of shipments and receipts.....do..	8,600,086	7,662,408	7,279,171	383,237	937,678	241,250	696,428
Capital expenditures.....do..	1,906,498	1,751,042	1,684,038	67,004	155,456	38,259	117,197

See footnotes at end of table.

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Type of ownership or control <sup>1</sup>				
	Corporate	Noncorporate			
		Total	Individual	Partnership	Cooperative and other
INDUSTRIES: 1963—Continued					
1213—Bituminous coal mining services:					
Establishments <sup>2</sup> .....number..	66	101	55	46	
With 20 or more employees.....do..	12	1	-	1	
All employees:					
Number.....	897	407	206	201	
Payroll.....\$1,000..	5,100	1,912	928	984	
Value added in mining.....do..	11,746	5,034	2,295	2,739	
Value of shipments and receipts.....do..	16,984	6,997	2,744	4,253	
Capital expenditures.....do..	2,053	819	277	542	
13--OIL AND GAS EXTRACTION:					
1963					
Establishments <sup>2</sup> .....number..	27,402	22,298	13,511	7,700	1,080
With 20 or more employees.....do..	2,258	333	179	141	
All employees:					
Number.....	218,240	53,236	31,447	19,503	2,280
Payroll.....\$1,000..	1,527,203	217,508	125,193	81,856	10,400
Production, development, and exploration workers:					
Number.....	147,527	44,449	26,209	16,396	1,840
Man-hours.....1,000..	311,422	85,926	49,593	32,531	3,800
Wages.....\$1,000..	915,179	177,869	101,770	67,839	8,200
Value added in mining.....do..	9,717,960	1,301,836	716,606	497,239	87,900
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	4,869,658	526,624	271,082	218,986	36,500
Purchased machinery installed.....do..	561,363	86,710	49,512	30,416	6,700
Value of shipments and receipts.....do..	12,856,781	1,655,678	896,389	643,213	116,000
Capital expenditures.....do..	2,292,200	259,492	140,811	103,428	15,200
1958 <sup>3</sup>					
All employees:					
Number.....	241,133	71,667	34,611	32,686	4,300
Payroll.....\$1,000..	1,426,714	272,706	123,817	130,427	18,400
Production, development, and exploration workers:					
Number.....	151,407	62,528	30,255	28,742	3,500
Man-hours.....1,000..	321,073	119,029	55,263	57,412	6,300
Wages.....\$1,000..	784,806	225,873	102,665	109,512	13,600
Value added in mining.....do..	7,941,022	1,094,267	490,149	464,902	139,200
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	3,576,882	560,219	249,046	232,520	78,600
Purchased machinery installed.....do..	541,625	112,607	48,758	52,932	10,900
Value of shipments and receipts.....do..	10,105,844	1,531,043	682,279	653,247	195,500
Capital expenditures.....do..	1,953,685	236,050	105,674	97,107	33,200
1954 <sup>3</sup>					
All employees:					
Number.....	230,877	84,858	37,796	45,086	1,900
Value added in mining.....\$1,000..	6,546,358	1,127,336	448,508	596,582	82,200
INDUSTRIES: 1963					
1311—Crude petroleum and natural gas:					
Establishments <sup>2</sup> .....number..	16,023	13,663	7,557	5,120	900
With 20 or more employees.....do..	975	93	49	38	
All employees:					
Number.....	121,783	23,461	12,816	8,937	1,700
Payroll.....\$1,000..	921,529	94,902	53,048	34,403	7,400
Value added in mining.....do..	7,989,887	1,026,485	556,319	389,563	80,600
Value of shipments and receipts.....do..	8,628,267	1,265,496	677,953	486,563	100,900
Capital expenditures.....do..	1,992,122	217,808	115,705	88,139	13,900
Crude petroleum:					
Establishments <sup>2</sup> .....number..	13,242	12,076	6,890	4,341	800
With 20 or more employees.....do..	793	88	46	36	
All employees:					
Number.....	104,316	21,526	11,936	8,068	1,500
Payroll.....\$1,000..	805,298	87,334	48,905	31,719	6,500
Value added in mining.....do..	6,930,039	882,917	479,429	334,625	68,800
Value of shipments and receipts.....do..	7,520,421	1,079,665	593,583	399,212	86,800
Capital expenditures.....do..	1,722,297	184,201	103,995	68,900	11,200

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Establishments, total	Type of company organization <sup>1</sup>					
		Multi-unit			Single unit		
		Total	Corporate ownership or control	Noncorporate ownership	Total	Corporate ownership or control	Noncorporate ownership
INDUSTRIES: 1963—Continued							
1311—Crude petroleum and natural gas--Continued							
Natural gas:							
Establishments <sup>2</sup> .....number..	4,368	2,775	2,364	411	1,593	417	1,176
With 20 or more employees.....do..	187	173	170	3	14	12	2
All employees:							
Number.....	19,402	16,709	16,050	659	2,693	1,417	1,276
Payroll.....\$1,000..	123,799	112,419	108,911	3,508	11,380	7,320	4,060
Value added in mining.....do..	1,203,416	1,049,416	1,011,740	37,676	154,000	48,108	105,892
Value of shipments and receipts.....do..	1,293,677	1,099,583	1,056,067	43,516	194,094	51,779	142,315
Capital expenditures.....do..	303,432	268,599	260,687	7,912	34,833	9,138	25,695
1321—Natural gas liquids:							
Establishments.....number..	650	617	601	16	33	24	9
With 20 or more employees.....do..	245	234	231	3	11	8	3
All employees:							
Number.....	13,859	13,293	13,071	222	566	436	130
Payroll.....\$1,000..	96,553	93,221	91,861	1,360	3,332	2,575	757
Value added in mining.....do..	762,070	748,314	742,879	5,435	13,756	8,797	4,959
Value of shipments and receipts.....do..	2,800,802	2,765,897	2,753,397	12,500	34,905	20,526	14,379
Capital expenditures.....do..	113,856	112,267	110,952	1,315	1,589	1,102	487
1381—Drilling oil and gas wells:							
Establishments <sup>2</sup> .....number..	8,428	2,241	1,726	515	6,187	3,110	3,077
With 20 or more employees.....do..	713	317	255	62	396	313	83
All employees:							
Number.....	55,416	21,048	17,304	3,744	34,368	22,544	11,824
Payroll.....\$1,000..	318,150	140,583	121,119	19,464	177,567	126,825	50,742
Value added in mining.....do..	653,337	279,145	237,709	41,436	374,192	257,346	116,846
Value of shipments and receipts.....do..	979,316	439,305	372,722	66,583	540,011	379,497	160,514
Capital expenditures.....do..	148,026	85,271	76,219	9,052	62,755	45,198	17,557
1382—Oil and gas exploration services:							
Establishments <sup>2</sup> .....number..	1,681	549	539	10	1,132	579	553
With 20 or more employees.....do..	85	54	54	-	31	28	3
All employees:							
Number.....	8,683	5,127	5,108	19	3,556	2,645	911
Payroll.....\$1,000..	47,828	30,334	30,229	105	17,494	13,199	4,295
Value added in mining.....do..	89,988	54,228	53,976	252	35,760	27,412	8,348
Value of shipments and receipts.....do..	119,824	70,431	70,082	349	49,393	37,630	11,763
Capital expenditures.....do..	11,726	7,171	7,144	27	4,555	3,380	1,175
1389—Oil and gas field services, n.e.c.:							
Establishments <sup>2</sup> .....number..	9,255	1,710	1,552	158	7,545	3,248	4,297
With 20 or more employees.....do..	480	216	210	6	264	184	80
All employees:							
Number.....	48,274	20,336	19,715	621	27,938	15,634	12,304
Payroll.....\$1,000..	265,749	148,330	145,876	2,454	117,419	73,990	43,429
Value added in mining.....do..	498,029	267,068	262,415	4,653	230,961	137,539	93,422
Value of shipments and receipts.....do..	718,754	423,309	417,445	5,860	295,445	177,211	118,234
Capital expenditures.....do..	68,154	39,446	38,858	588	28,708	17,225	11,483
14--NONMETALLIC MINERALS MINING:							
1963							
Establishments <sup>2</sup> .....number..	8,457	2,072	1,851	221	6,385	2,603	3,782
With 20 or more employees.....do..	1,479	835	805	30	644	539	105
All employees:							
Number.....	121,238	71,047	69,022	2,025	50,191	34,653	15,538
Payroll.....\$1,000..	661,453	420,460	411,231	9,229	240,993	178,350	62,643
Production, development, and exploration workers:							
Number.....	98,355	55,716	54,005	1,711	42,639	28,979	13,660
Man-hours.....1,000..	212,786	122,701	118,926	3,775	90,085	61,547	28,538
Wages.....\$1,000..	501,952	305,634	297,670	7,964	196,318	141,093	55,225
Value added in mining.....do..	1,744,774	1,169,414	1,146,706	22,708	575,360	419,374	155,986
Cost of supplies, minerals received for prepa- ration, purchased fuels and electric energy, and contract work.....do..	677,490	440,902	428,881	12,021	236,588	167,247	69,341
Purchased machinery installed.....do..	172,167	92,597	89,978	2,619	79,570	49,071	30,499
Value of shipments and receipts.....do..	2,346,903	1,558,014	1,527,433	30,581	788,889	565,636	223,253
Capital expenditures.....do..	247,528	144,899	138,132	6,767	102,629	70,056	32,573

See footnotes at end of table.

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Type of ownership or control <sup>1</sup>				
	Corporate	Noncorporate			
		Total	Individual	Partnership	Cooperative and other
INDUSTRIES: 1963—Continued					
1311—Crude petroleum and natural gas—Continued					
Natural gas:					
Establishments <sup>2</sup> .....number..	2,781	1,587	667	779	141
With 20 or more employees.....do..	182	5	3	2	-
All employees:					
Number.....	17,467	1,935	880	869	186
Payroll.....\$1,000..	116,231	7,568	4,143	2,684	741
Value added in mining.....do..	1,059,848	143,568	76,890	54,938	11,740
Value of shipments and receipts.....do..	1,107,846	185,831	84,370	87,351	14,110
Capital expenditures.....do..	269,825	33,607	11,710	19,239	2,658
1321—Natural gas liquids:					
Establishments.....number..	625	25	4	17	4
With 20 or more employees.....do..	239	6	-	4	2
All employees:					
Number.....	13,507	352	22	223	107
Payroll.....\$1,000..	94,436	2,117	152	1,258	707
Value added in mining.....do..	751,676	10,394	585	6,930	2,879
Value of shipments and receipts.....do..	2,773,923	26,879	3,007	16,213	7,659
Capital expenditures.....do..	112,054	1,802	298	655	849
1381—Drilling oil and gas wells:					
Establishments <sup>2</sup> .....number..	4,836	3,592	2,254	1,289	49
With 20 or more employees.....do..	568	145	65	75	5
All employees:					
Number.....	39,848	15,568	8,832	6,385	351
Payroll.....\$1,000..	247,944	70,206	37,433	30,975	1,798
Value added in mining.....do..	495,055	158,282	87,113	67,663	3,506
Value of shipments and receipts.....do..	752,219	227,097	122,923	98,091	6,083
Capital expenditures.....do..	121,417	26,609	15,590	10,673	346
1382—Oil and gas exploration services:					
Establishments <sup>2</sup> .....number..	1,118	563	381	170	12
With 20 or more employees.....do..	82	3	1	2	-
All employees:					
Number.....	7,753	930	595	312	23
Payroll.....\$1,000..	43,428	4,400	2,813	1,463	124
Value added in mining.....do..	81,388	8,600	5,552	2,856	192
Value of shipments and receipts.....do..	107,712	12,112	7,579	4,281	252
Capital expenditures.....do..	10,524	1,202	799	365	38
1389—Oil and gas field services, n.e.c.:					
Establishments <sup>2</sup> .....number..	4,800	4,455	3,315	1,104	36
With 20 or more employees.....do..	394	86	64	22	-
All employees:					
Number.....	35,349	12,925	9,182	3,646	97
Payroll.....\$1,000..	219,866	45,883	31,747	13,757	379
Value added in mining.....do..	399,954	98,075	67,037	30,227	811
Value of shipments and receipts.....do..	594,660	124,094	84,927	38,065	1,102
Capital expenditures.....do..	56,083	12,071	8,419	3,596	56
14—NONMETALLIC MINERALS MINING:					
1963					
Establishments <sup>2</sup> .....number..	4,454	4,003	2,596	1,366	41
With 20 or more employees.....do..	1,344	135	50	81	4
All employees:					
Number.....	103,675	17,563	9,958	7,229	376
Payroll.....\$1,000..	589,581	71,872	37,838	31,812	2,226
Production, development, and exploration workers:					
Number.....	82,984	15,371	8,657	6,382	336
Man-hours.....\$1,000..	180,473	32,313	18,098	13,440	771
Wages.....\$1,000..	438,763	63,189	33,237	28,033	1,915
Value added in mining.....do..	1,566,080	178,694	83,453	90,468	4,771
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	596,128	81,362	38,447	40,638	2,271
Purchased machinery installed.....do..	139,049	33,118	19,834	12,205	1,071
Value of shipments and receipts.....do..	2,093,069	253,834	123,512	123,300	7,021
Capital expenditures.....do..	208,188	39,340	18,222	20,011	1,101

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Establishments, total	Type of company organization <sup>1</sup>					
		Multi-unit			Single unit		
		Total	Corporate ownership or control	Noncorporate ownership	Total	Corporate ownership or control	Noncorporate ownership
14--NONMETALLIC MINERALS MINING--Continued							
1958 <sup>3</sup>							
All employees:							
Number.....	116,812	68,852	65,941	2,911	47,960	31,032	16,928
Payroll.....\$1,000..	546,902	347,185	335,578	11,607	199,717	138,766	60,951
Production, development, and exploration workers:							
Number.....	95,364	54,668	52,012	2,656	40,696	25,654	15,042
Man-hours.....1,000..	202,446	118,424	113,012	5,412	84,022	52,776	31,246
Wages.....\$1,000..	409,596	249,638	239,098	10,540	159,958	106,437	53,521
Value added in mining.....do..	1,384,425	900,292	870,568	29,724	484,133	321,511	162,622
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	543,680	359,410	348,273	11,137	184,270	120,417	63,853
Purchased machinery installed.....do..	129,506	75,066	72,064	3,002	54,440	37,202	17,238
Value of shipments and receipts.....do..	1,868,613	1,229,853	1,190,161	39,692	638,760	425,230	213,530
Capital expenditures.....do..	188,998	104,915	100,744	4,171	84,083	53,900	30,183
1954 <sup>3</sup>							
All employees:							
Number.....	113,428	67,272	62,402	4,870	46,156	26,159	19,997
Value added in mining.....\$1,000..	1,181,986	820,555	779,022	41,533	361,431	222,101	139,330
INDUSTRIES: 1963							
1411--Dimension stone:							
Establishments.....number..	319	54	50	4	265	71	194
With 20 or more employees.....do..	25	12	11	1	13	11	2
All employees:							
Number.....	2,156	846	818	28	1,310	719	591
Payroll.....\$1,000..	7,844	3,717	3,640	77	4,127	2,496	1,631
Value added in mining.....do..	14,842	6,975	6,907	68	7,867	4,165	3,702
Value of shipments and receipts.....do..	19,735	9,451	9,348	103	10,284	5,609	4,675
Capital expenditures.....do..	1,114	371	367	4	743	268	475
Dimension limestone:							
Establishments.....number..	61	4	4	-	57	14	43
With 20 or more employees.....do..	5	1	1	-	4	4	-
All employees:							
Number.....	326	32	32	-	294	183	111
Payroll.....\$1,000..	1,266	169	169	-	1,097	692	405
Value added in mining.....do..	2,947	677	677	-	2,270	1,223	1,047
Value of shipments and receipts.....do..	3,513	683	683	-	2,830	1,577	1,253
Capital expenditures.....do..	282	57	57	-	225	70	155
Dimension granite:							
Establishments.....number..	66	26	25	1	40	20	20
With 20 or more employees.....do..	10	9	8	1	1	1	-
All employees:							
Number.....	824	590	(D)	(D)	234	(D)	(D)
Payroll.....\$1,000..	3,601	2,745	(D)	(D)	856	(D)	(D)
Value added in mining.....do..	6,513	4,782	(D)	(D)	1,731	(D)	(D)
Value of shipments and receipts.....do..	9,428	6,930	(D)	(D)	2,498	(D)	(D)
Capital expenditures.....do..	385	279	(D)	(D)	106	(D)	(D)
Dimension stone, n.e.c.:							
Establishments.....number..	192	24	21	3	168	37	131
With 20 or more employees.....do..	10	2	2	-	8	6	2
All employees:							
Number.....	1,006	224	(D)	(D)	782	(D)	(D)
Payroll.....\$1,000..	2,977	803	(D)	(D)	2,174	(D)	(D)
Value added in mining.....do..	5,382	1,516	(D)	(D)	3,866	(D)	(D)
Value of shipments and receipts.....do..	6,794	1,838	(D)	(D)	4,956	(D)	(D)
Capital expenditures.....do..	447	35	(D)	(D)	412	(D)	(D)
1421--Crushed and broken stone:							
Establishments.....number..	2,254	824	730	94	1,430	725	705
With 20 or more employees.....do..	667	385	374	11	282	253	29
All employees:							
Number.....	43,236	25,022	24,206	816	18,214	14,225	3,989
Payroll.....\$1,000..	229,115	138,673	134,910	3,763	90,442	74,007	16,435
Value added in mining.....do..	581,655	357,339	347,509	9,830	224,316	182,001	42,315
Value of shipments and receipts.....do..	794,860	492,716	479,599	13,117	302,144	241,133	61,011
Capital expenditures.....do..	82,687	43,026	41,993	1,033	39,661	31,135	8,526

See footnotes at end of table.

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Type of ownership or control <sup>1</sup>				
	Corporate	Noncorporate			
		Total	Individual	Partnership	Cooperative and other
14--NONMETALLIC MINERALS MINING--Continued					
1958 <sup>3</sup>					
All employees:					
Number.....	96,973	19,839	10,226	9,368	245
Payroll.....\$1,000..	474,344	72,558	35,812	35,848	898
Production, development, and exploration workers:					
Number.....	77,666	17,698	9,147	8,345	206
Man-hours.....1,000..	165,788	36,658	19,148	17,053	457
Wages.....\$1,000..	345,535	64,061	31,892	31,379	790
Value added in mining.....do..	1,192,079	192,346	89,705	100,539	2,102
Cost of supplies, minerals received for preparation, purchased fuels and electric energy, and contract work.....do..	468,690	74,990	33,999	40,368	623
Purchased machinery installed.....do..	109,266	20,240	9,035	10,812	393
Value of shipments and receipts.....do..	1,615,391	253,222	115,367	135,158	2,697
Capital expenditures.....do..	154,644	34,354	17,372	16,561	421
1954 <sup>3</sup>					
All employees:					
Number.....	88,561	24,867	12,526	11,810	531
Value added in mining.....\$1,000..	1,001,123	180,863	77,276	100,195	3,392
INDUSTRIES: 1963					
1411--Dimension stone:					
Establishments.....number..	121	198	151	46	1
With 20 or more employees.....do..	22	3	2	1	-
All employees:					
Number.....	1,537	619	471	(D)	(D)
Payroll.....\$1,000..	6,136	1,708	1,294	(D)	(D)
Value added in mining.....do..	11,072	3,770	2,714	(D)	(D)
Value of shipments and receipts.....do..	14,957	4,778	3,408	(D)	(D)
Capital expenditures.....do..	635	479	347	(D)	(D)
Dimension limestone:					
Establishments.....number..	18	43	31	12	-
With 20 or more employees.....do..	5	-	-	-	-
All employees:					
Number.....	215	111	90	21	-
Payroll.....\$1,000..	861	405	353	52	-
Value added in mining.....do..	1,900	1,047	824	223	-
Value of shipments and receipts.....do..	2,260	1,253	970	283	-
Capital expenditures.....do..	127	155	132	23	-
Dimension granite:					
Establishments.....number..	45	21	18	3	-
With 20 or more employees.....do..	9	1	1	-	-
All employees:					
Number.....	736	88	76	12	-
Payroll.....\$1,000..	3,320	281	239	42	-
Value added in mining.....do..	5,955	558	417	141	-
Value of shipments and receipts.....do..	8,644	784	594	190	-
Capital expenditures.....do..	331	54	35	19	-
Dimension stone, n.e.c.:					
Establishments.....number..	58	134	102	31	1
With 20 or more employees.....do..	8	2	1	1	-
All employees:					
Number.....	586	420	305	(D)	(D)
Payroll.....\$1,000..	1,955	1,022	702	(D)	(D)
Value added in mining.....do..	3,217	2,165	1,473	(D)	(D)
Value of shipments and receipts.....do..	4,053	2,741	1,844	(D)	(D)
Capital expenditures.....do..	177	270	180	(D)	(D)
1421--Crushed and broken stone:					
Establishments.....number..	1,455	799	490	300	9
With 20 or more employees.....do..	627	40	18	21	1
All employees:					
Number.....	38,431	4,805	2,655	2,069	81
Payroll.....\$1,000..	208,917	20,198	10,839	8,949	410
Value added in mining.....do..	529,510	52,145	26,348	25,095	702
Value of shipments and receipts.....do..	720,732	74,128	37,771	35,167	1,190
Capital expenditures.....do..	73,128	9,559	4,814	4,532	213



# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Establishments. total	Type of company organization <sup>1</sup>					
		Multi-unit			Single unit		
		Total	Corporate ownership or control	Noncorporate ownership	Total	Corporate ownership or control	Noncorporate ownership
INDUSTRIES: 1963—Continued							
1421--Crushed and broken stone--Continued							
Crushed and broken limestone:							
Establishments.....number..	1,611	577	502	75	1,034	534	500
With 20 or more employees.....do..	490	267	259	8	223	202	21
All employees:							
Number.....	31,095	17,273	16,624	649	13,822	10,730	3,092
Payroll.....\$1,000..	160,588	94,653	91,732	2,921	65,935	53,431	12,504
Value added in mining.....do..	408,450	243,216	234,926	8,290	165,234	132,063	33,171
Value of shipments and receipts.....do..	542,886	321,392	310,530	10,862	221,494	174,504	46,990
Capital expenditures.....do..	59,535	30,530	29,663	867	29,005	22,382	6,623
Crushed and broken granite:							
Establishments.....number..	150	81	81	-	69	31	38
With 20 or more employees.....do..	65	51	51	-	14	13	1
All employees:							
Number.....	4,060	3,278	3,278	-	782	656	126
Payroll.....\$1,000..	19,826	15,754	15,754	-	4,072	3,435	637
Value added in mining.....do..	61,702	50,840	50,840	-	10,862	9,282	1,580
Value of shipments and receipts.....do..	89,749	76,080	76,080	-	13,669	11,800	1,869
Capital expenditures.....do..	7,185	5,655	5,655	-	1,530	1,026	504
Crushed and broken stone, n.e.c.:							
Establishments.....number..	493	166	147	19	327	160	167
With 20 or more employees.....do..	112	67	64	3	45	38	7
All employees:							
Number.....	8,081	4,471	4,304	167	3,610	2,839	771
Payroll.....\$1,000..	48,701	28,266	27,424	842	20,435	17,141	3,294
Value added in mining.....do..	111,503	63,283	61,743	1,540	48,220	40,656	7,564
Value of shipments and receipts.....do..	162,225	95,244	92,989	2,255	66,981	54,829	12,152
Capital expenditures.....do..	15,967	6,841	6,675	166	9,126	7,727	1,399
1441—Sand and gravel:							
Establishments.....number..	4,619	791	707	84	3,828	1,455	2,373
With 20 or more employees.....do..	510	231	219	12	279	218	61
All employees:							
Number.....	40,142	15,203	14,454	749	24,939	15,862	9,077
Payroll.....\$1,000..	212,160	91,670	88,297	3,373	120,490	83,094	37,396
Value added in mining.....do..	513,728	238,135	230,395	7,740	275,593	186,825	88,768
Value of shipments and receipts.....do..	678,068	298,341	287,937	10,404	379,727	249,983	129,744
Capital expenditures.....do..	75,724	27,489	26,601	888	48,235	29,942	18,293
Construction sand and gravel:							
Establishments.....number..	4,423	708	634	74	3,715	1,392	2,323
With 20 or more employees.....do..	461	200	190	10	261	201	60
All employees:							
Number.....	36,394	12,632	12,012	620	23,762	14,839	8,923
Payroll.....\$1,000..	190,924	76,081	73,383	2,698	114,843	78,053	36,790
Value added in mining.....do..	459,288	196,981	191,723	5,258	262,307	175,294	87,013
Value of shipments and receipts.....do..	607,539	246,849	239,577	7,272	360,690	233,320	127,370
Capital expenditures.....do..	68,954	22,700	22,028	672	46,254	28,362	17,892
Glass sand:							
Establishments.....number..	38	19	18	1	19	17	2
With 20 or more employees.....do..	22	13	12	1	9	8	1
All employees:							
Number.....	1,570	1,194	(D)	(D)	376	(D)	(D)
Payroll.....\$1,000..	9,140	7,447	(D)	(D)	1,693	(D)	(D)
Value added in mining.....do..	22,649	19,014	(D)	(D)	3,635	(D)	(D)
Value of shipments and receipts.....do..	29,099	23,856	(D)	(D)	5,243	(D)	(D)
Capital expenditures.....do..	3,998	3,044	(D)	(D)	954	(D)	(D)
Molding sand:							
Establishments.....number..	93	43	35	8	50	17	33
With 20 or more employees.....do..	11	8	7	1	3	3	-
All employees:							
Number.....	927	570	(D)	(D)	357	(D)	(D)
Payroll.....\$1,000..	4,992	3,181	(D)	(D)	1,811	(D)	(D)
Value added in mining.....do..	12,838	7,566	(D)	(D)	5,272	(D)	(D)
Value of shipments and receipts.....do..	16,642	9,481	(D)	(D)	7,161	(D)	(D)
Capital expenditures.....do..	904	528	(D)	(D)	376	(D)	(D)

See footnotes at end of table.

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Type of ownership or control <sup>1</sup>				
	Corporate	Noncorporate			
		Total	Individual	Partnership	Cooperative and other
INDUSTRIES: 1963—Continued					
1421—Crushed and broken stone--Continued					
Crushed and broken limestone:					
Establishments.....number..	1,036	575	342	226	7
With 20 or more employees.....do..	461	29	12	16	1
All employees:					
Number.....	27,354	3,741	2,025	(D)	(D)
Payroll.....\$1,000..	145,163	15,425	8,097	(D)	(D)
Value added in mining.....do..	366,989	41,461	19,796	(D)	(D)
Value of shipments and receipts.....do..	485,034	57,852	27,832	(D)	(D)
Capital expenditures.....do..	52,045	7,490	3,860	(D)	(D)
Crushed and broken granite:					
Establishments.....number..	112	38	23	14	1
With 20 or more employees.....do..	64	1	-	1	-
All employees:					
Number.....	3,934	126	61	(D)	(D)
Payroll.....\$1,000..	19,189	637	249	(D)	(D)
Value added in mining.....do..	60,122	1,580	617	(D)	(D)
Value of shipments and receipts.....do..	87,880	1,869	678	(D)	(D)
Capital expenditures.....do..	6,681	504	157	(D)	(D)
Crushed and broken stone, n.e.c.:					
Establishments.....number..	307	186	125	60	1
With 20 or more employees.....do..	102	10	6	4	-
All employees:					
Number.....	7,143	938	569	(D)	(D)
Payroll.....\$1,000..	44,565	4,136	2,493	(D)	(D)
Value added in mining.....do..	102,399	9,104	5,935	(D)	(D)
Value of shipments and receipts.....do..	147,818	14,407	9,261	(D)	(D)
Capital expenditures.....do..	14,402	1,565	797	(D)	(D)
1441—Sand and gravel:					
Establishments.....number..	2,162	2,457	1,590	845	22
With 20 or more employees.....do..	437	73	24	48	1
All employees:					
Number.....	30,316	9,826	5,441	4,195	190
Payroll.....\$1,000..	171,391	40,769	20,616	19,197	956
Value added in mining.....do..	417,220	96,508	40,189	54,028	2,291
Value of shipments and receipts.....do..	537,920	140,148	64,270	72,901	2,977
Capital expenditures.....do..	56,543	19,181	9,944	8,816	421
Construction sand and gravel:					
Establishments.....number..	2,026	2,397	1,561	814	22
With 20 or more employees.....do..	391	70	24	45	1
All employees:					
Number.....	26,851	9,543	5,357	3,996	190
Payroll.....\$1,000..	151,436	39,488	20,335	18,197	956
Value added in mining.....do..	367,017	92,271	39,057	50,923	2,291
Value of shipments and receipts.....do..	472,897	134,642	62,874	68,791	2,977
Capital expenditures.....do..	50,390	18,564	9,848	8,295	421
Glass sand:					
Establishments.....number..	35	3	1	2	-
With 20 or more employees.....do..	20	2	-	2	-
All employees:					
Number.....	1,526	44	(D)	(D)	-
Payroll.....\$1,000..	8,936	204	(D)	(D)	-
Value added in mining.....do..	21,856	793	(D)	(D)	-
Value of shipments and receipts.....do..	28,094	1,005	(D)	(D)	-
Capital expenditures.....do..	3,766	232	(D)	(D)	-
Molding sand:					
Establishments.....number..	52	41	19	22	-
With 20 or more employees.....do..	10	1	-	1	-
All employees:					
Number.....	774	153	45	108	-
Payroll.....\$1,000..	4,279	713	136	577	-
Value added in mining.....do..	10,529	2,309	642	1,667	-
Value of shipments and receipts.....do..	13,587	3,055	788	2,267	-
Capital expenditures.....do..	707	197	29	168	-

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Establishments, total	Type of company organization <sup>1</sup>					
		Multi-unit			Single unit		
		Total	Corporate ownership or control	Noncorporate ownership	Total	Corporate ownership or control	Noncorporate ownership
INDUSTRIES: 1963—Continued							
1441—Sand and gravel—Continued							
Industrial sand, n.e.c.:							
Establishments.....number..	65	21	20	1	44	29	15
With 20 or more employees.....do..	16	10	10	-	6	6	-
All employees:							
Number.....	1,255	811	(D)	(D)	444	(D)	(D)
Payroll.....\$1,000..	7,105	4,962	(D)	(D)	2,143	(D)	(D)
Value added in mining.....do..	18,771	14,392	(D)	(D)	4,379	(D)	(D)
Value of shipments and receipts.....do..	24,788	18,155	(D)	(D)	6,633	(D)	(D)
Capital expenditures.....do..	1,866	1,215	(D)	(D)	651	(D)	(D)
1452—Bentonite:							
Establishments.....number..	37	23	22	1	14	7	7
With 20 or more employees.....do..	16	12	11	1	4	3	1
All employees:							
Number.....	811	652	(D)	(D)	159	(D)	(D)
Payroll.....\$1,000..	4,127	3,061	(D)	(D)	1,066	(D)	(D)
Value added in mining.....do..	11,434	10,187	(D)	(D)	1,247	(D)	(D)
Value of shipments and receipts.....do..	18,105	14,858	(D)	(D)	3,247	(D)	(D)
Capital expenditures.....do..	1,356	950	(D)	(D)	406	(D)	(D)
1453—Fire clay:							
Establishments.....number..	155	42	33	9	113	44	69
With 20 or more employees.....do..	13	6	6	-	7	6	1
All employees:							
Number.....	979	444	424	20	535	325	210
Payroll.....\$1,000..	4,608	2,271	2,174	97	2,337	1,585	752
Value added in mining.....do..	12,640	5,814	5,620	194	6,826	3,799	3,027
Value of shipments and receipts.....do..	17,105	7,894	7,498	396	9,211	4,835	4,376
Capital expenditures.....do..	2,159	809	745	64	1,350	477	873
1454—Fuller's earth:							
Establishments.....number..	14	8	8	-	6	3	3
With 20 or more employees.....do..	8	7	7	-	1	-	1
All employees:							
Number.....	758	671	671	-	87	19	68
Payroll.....\$1,000..	3,067	2,742	2,742	-	325	86	239
Value added in mining.....do..	9,071	8,246	8,246	-	825	192	633
Value of shipments and receipts.....do..	12,954	11,778	11,778	-	1,176	244	932
Capital expenditures.....do..	1,173	947	947	-	226	11	215
1455—Kaolin and ball clay:							
Establishments.....number..	48	28	22	6	20	14	6
With 20 or more employees.....do..	28	16	16	-	12	11	1
All employees:							
Number.....	3,346	2,747	2,691	56	599	530	69
Payroll.....\$1,000..	17,718	15,116	14,816	300	2,602	2,372	230
Value added in mining.....do..	49,841	40,615	39,676	939	9,226	8,104	1,122
Value of shipments and receipts.....do..	66,077	54,347	52,869	1,478	11,730	10,629	1,101
Capital expenditures.....do..	5,237	3,697	3,664	33	1,540	1,288	252
1456—Feldspar:							
Establishments.....number..	31	13	13	-	18	5	13
With 20 or more employees.....do..	10	9	9	-	1	1	-
All employees:							
Number.....	461	363	363	-	98	79	19
Payroll.....\$1,000..	1,963	1,638	1,638	-	325	258	67
Value added in mining.....do..	6,117	4,451	4,451	-	1,666	900	766
Value of shipments and receipts.....do..	8,459	6,978	6,978	-	1,481	1,421	60
Capital expenditures.....do..	1,702	785	785	-	917	112	805
1459—Clay and related minerals, n.e.c.:							
Establishments.....number..	130	45	45	-	85	41	44
With 20 or more employees.....do..	34	26	26	-	8	7	1
All employees:							
Number.....	1,961	1,324	1,324	-	637	481	156
Payroll.....\$1,000..	10,688	7,651	7,651	-	3,037	2,597	440
Value added in mining.....do..	24,481	18,650	18,650	-	5,831	4,619	1,212
Value of shipments and receipts.....do..	38,944	28,883	28,883	-	10,061	8,508	1,553
Capital expenditures.....do..	2,992	1,518	1,518	-	1,474	1,205	269

See footnotes at end of table.

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Type of ownership or control <sup>1</sup>				
	Corporate	Noncorporate			
		Total	Individual	Partnership	Cooperative and other
INDUSTRIES: 1963—Continued					
1441--Sand and gravel--Continued					
Industrial sand, n.e.c.:					
Establishments.....number..	49	16	9	7	-
With 20 or more employees.....do..	16	-	-	-	-
All employees:					
Number.....	1,169	86	(D)	(D)	-
Payroll.....\$1,000..	6,741	364	(D)	(D)	-
Value added in mining.....do..	17,636	1,135	(D)	(D)	-
Value of shipments and receipts.....do..	23,342	1,446	(D)	(D)	-
Capital expenditures.....do..	1,678	188	(D)	(D)	-
1452—Bentonite:					
Establishments.....number..	29	8	2	6	-
With 20 or more employees.....do..	14	2	-	2	-
All employees:					
Number.....	752	59	(D)	(D)	-
Payroll.....\$1,000..	3,788	339	(D)	(D)	-
Value added in mining.....do..	10,908	526	(D)	(D)	-
Value of shipments and receipts.....do..	17,193	912	(D)	(D)	-
Capital expenditures.....do..	1,316	40	(D)	(D)	-
1453—Fire clay:					
Establishments.....number..	77	78	53	22	3
With 20 or more employees.....do..	12	1	-	1	-
All employees:					
Number.....	749	230	146	78	6
Payroll.....\$1,000..	3,759	849	484	327	38
Value added in mining.....do..	9,419	3,221	1,567	1,448	206
Value of shipments and receipts.....do..	12,333	4,772	2,098	2,374	300
Capital expenditures.....do..	1,222	937	363	525	49
1454—Fuller's earth:					
Establishments.....number..	11	3	-	3	-
With 20 or more employees.....do..	7	1	-	1	-
All employees:					
Number.....	690	68	-	68	-
Payroll.....\$1,000..	2,828	239	-	239	-
Value added in mining.....do..	8,438	633	-	633	-
Value of shipments and receipts.....do..	12,022	932	-	932	-
Capital expenditures.....do..	958	215	-	215	-
1455—Kaolin and ball clay:					
Establishments.....number..	36	12	6	6	-
With 20 or more employees.....do..	27	1	-	1	-
All employees:					
Number.....	3,221	125	47	78	-
Payroll.....\$1,000..	17,188	530	214	316	-
Value added in mining.....do..	47,780	2,061	558	1,503	-
Value of shipments and receipts.....do..	63,498	2,579	870	1,709	-
Capital expenditures.....do..	4,952	285	46	239	-
1456—Feldspar:					
Establishments.....number..	18	13	10	3	-
With 20 or more employees.....do..	10	-	-	-	-
All employees:					
Number.....	442	19	11	8	-
Payroll.....\$1,000..	1,896	67	50	17	-
Value added in mining.....do..	5,351	766	763	3	-
Value of shipments and receipts.....do..	8,399	60	42	18	-
Capital expenditures.....do..	897	805	803	2	-
1459—Clay and related minerals, n.e.c.:					
Establishments.....number..	86	44	36	8	-
With 20 or more employees.....do..	33	1	1	-	-
All employees:					
Number.....	1,805	156	148	8	-
Payroll.....\$1,000..	10,248	440	424	16	-
Value added in mining.....do..	23,269	1,212	1,172	40	-
Value of shipments and receipts.....do..	37,391	1,553	1,479	74	-
Capital expenditures.....do..	2,723	269	258	11	-

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Establishments, total	Type of company organization <sup>1</sup>					
		Multi-unit			Single unit		
		Total	Corporate ownership or control	Noncorporate ownership	Total	Corporate ownership or control	Noncorporate ownership
INDUSTRIES: 1963—Continued							
1472—Barite:							
Establishments.....number..	54	17	13	4	37	15	22
With 20 or more employees.....do..	13	8	6	2	5	4	1
All employees:							
Number.....	1,434	1,105	1,014	91	329	210	119
Payroll.....\$1,000..	6,799	5,765	5,395	370	1,034	628	406
Value added in mining.....do..	11,107	8,836	7,909	927	2,271	1,098	1,173
Value of shipments and receipts.....do..	16,668	13,860	12,715	1,145	2,808	1,467	1,341
Capital expenditures.....do..	1,101	448	423	25	653	393	260
1473—Fluorspar:							
Establishments.....number..	30	11	11	-	19	12	7
With 20 or more employees.....do..	7	7	7	-	-	-	-
All employees:							
Number.....	804	714	714	-	90	55	35
Payroll.....\$1,000..	3,987	3,653	3,653	-	334	234	100
Value added in mining.....do..	8,869	7,780	7,780	-	1,089	564	525
Value of shipments and receipts.....do..	15,792	13,949	13,949	-	1,843	1,218	625
Capital expenditures.....do..	313	260	260	-	53	47	6
1474—Potash, soda, and borate minerals:							
Establishments.....number..	23	18	17	1	5	2	3
With 20 or more employees.....do..	16	14	14	-	2	2	-
All employees:							
Number.....	7,050	6,817	(D)	(D)	233	(D)	(D)
Payroll.....\$1,000..	51,859	50,215	(D)	(D)	1,644	(D)	(D)
Value added in mining.....do..	156,151	148,740	(D)	(D)	7,411	(D)	(D)
Value of shipments and receipts.....do..	192,116	180,836	(D)	(D)	11,280	(D)	(D)
Capital expenditures.....do..	26,773	24,718	(D)	(D)	2,055	(D)	(D)
1475—Phosphate rock:							
Establishments.....number..	66	39	38	1	27	12	15
With 20 or more employees.....do..	39	34	33	1	5	4	1
All employees:							
Number.....	5,624	5,263	(D)	(D)	361	(D)	(D)
Payroll.....\$1,000..	31,955	30,379	(D)	(D)	1,576	(D)	(D)
Value added in mining.....do..	94,889	91,619	(D)	(D)	3,270	(D)	(D)
Value of shipments and receipts.....do..	161,658	155,708	(D)	(D)	5,950	(D)	(D)
Capital expenditures.....do..	22,234	21,925	(D)	(D)	309	(D)	(D)
1476—Rock salt:							
Establishments.....number..	25	13	13	-	12	6	6
With 20 or more employees.....do..	15	13	13	-	2	2	-
All employees:							
Number.....	2,443	2,148	2,148	-	295	273	22
Payroll.....\$1,000..	15,955	14,179	14,179	-	1,776	1,701	75
Value added in mining.....do..	49,539	45,705	45,705	-	3,834	3,601	233
Value of shipments and receipts.....do..	59,297	54,923	54,923	-	4,374	4,190	184
Capital expenditures.....do..	7,401	7,186	7,186	-	215	110	105
1477—Sulfur:							
Establishments.....number..	17	10	10	-	7	2	5
With 20 or more employees.....do..	10	10	10	-	-	-	-
All employees:							
Number.....	2,603	(D)	(D)	-	(D)	(D)	(D)
Payroll.....\$1,000..	20,597	(D)	(D)	-	(D)	(D)	(D)
Value added in mining.....do..	100,349	(D)	(D)	-	(D)	(D)	(D)
Value of shipments and receipts.....do..	113,103	(D)	(D)	-	(D)	(D)	(D)
Capital expenditures.....do..	1,086	(D)	(D)	-	(D)	(D)	(D)
1479—Chemical and fertilizer mining, n.e.c.:							
Establishments.....number..	19	7	7	-	12	4	8
With 20 or more employees.....do..	6	5	5	-	1	1	-
All employees:							
Number.....	1,082	1,018	1,018	-	64	47	17
Payroll.....\$1,000..	5,962	5,698	5,698	-	264	246	18
Value added in mining.....do..	12,409	12,000	12,000	-	409	280	129
Value of shipments and receipts.....do..	18,270	17,328	17,328	-	942	796	146
Capital expenditures.....do..	1,113	998	998	-	115	87	28

See footnotes at end of table.

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Type of ownership or control <sup>1</sup>				
	Corporate	Noncorporate			
		Total	Individual	Partnership	Cooperative and other
INDUSTRIES: 1963—Continued					
1472—Barite:					
Establishments.....number..	28	26	14	12	
With 20 or more employees.....do..	10	3	-	3	
All employees:					
Number.....	1,224	210	58	152	
Payroll.....\$1,000..	6,023	776	177	599	
Value added in mining.....do..	9,007	2,100	452	1,648	
Value of shipments and receipts.....do..	14,182	2,486	558	1,928	
Capital expenditures.....do..	816	285	49	236	
1473—Fluorspar:					
Establishments.....number..	23	7	6	1	
With 20 or more employees.....do..	7	-	-	-	
All employees:					
Number.....	769	35	(D)	(D)	
Payroll.....\$1,000..	3,887	100	(D)	(D)	
Value added in mining.....do..	8,344	525	(D)	(D)	
Value of shipments and receipts.....do..	15,167	625	(D)	(D)	
Capital expenditures.....do..	307	6	(D)	(D)	
1474—Potash, soda, and borate minerals:					
Establishments.....number..	19	4	2	2	
With 20 or more employees.....do..	16	-	-	-	
All employees:					
Number.....	7,039	11	(D)	(D)	
Payroll.....\$1,000..	51,806	53	(D)	(D)	
Value added in mining.....do..	156,070	81	(D)	(D)	
Value of shipments and receipts.....do..	192,072	44	(D)	(D)	
Capital expenditures.....do..	22,358	4,415	(D)	(D)	
1475—Phosphate rock:					
Establishments.....number..	50	16	11	5	
With 20 or more employees.....do..	37	2	2	-	
All employees:					
Number.....	5,468	156	127	29	
Payroll.....\$1,000..	31,150	805	688	117	
Value added in mining.....do..	93,379	1,510	1,160	350	
Value of shipments and receipts.....do..	158,860	2,798	1,780	1,018	
Capital expenditures.....do..	22,149	85	78	7	
1476—Rock salt:					
Establishments.....number..	19	6	4	2	
With 20 or more employees.....do..	15	-	-	-	
All employees:					
Number.....	2,421	22	(D)	(D)	
Payroll.....\$1,000..	15,880	75	(D)	(D)	
Value added in mining.....do..	49,306	233	(D)	(D)	
Value of shipments and receipts.....do..	59,113	184	(D)	(D)	
Capital expenditures.....do..	7,296	105	(D)	(D)	
1477—Sulfur:					
Establishments.....number..	12	5	3	2	
With 20 or more employees.....do..	10	-	-	-	
All employees:					
Number.....	(D)	(D)	(D)	(D)	
Payroll.....\$1,000..	(D)	(D)	(D)	(D)	
Value added in mining.....do..	(D)	(D)	(D)	(D)	
Value of shipments and receipts.....do..	(D)	(D)	(D)	(D)	
Capital expenditures.....do..	(D)	(D)	(D)	(D)	
1479—Chemical and fertilizer mining, n.e.c.:					
Establishments.....number..	11	8	5	3	
With 20 or more employees.....do..	6	-	-	-	
All employees:					
Number.....	1,065	17	17	-	
Payroll.....\$1,000..	5,944	18	18	-	
Value added in mining.....do..	12,280	129	67	62	
Value of shipments and receipts.....do..	18,124	146	64	82	
Capital expenditures.....do..	1,085	28	23	5	

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Establishments, total	Type of company organization <sup>1</sup>					
		Multi-unit			Single unit		
		Total	Corporate ownership or control	Noncorporate ownership	Total	Corporate ownership or control	Noncorporate ownership
INDUSTRIES: 1963—Continued							
1481—Nonmetallic minerals services:							
Establishments <sup>2</sup> .....number..	164	14	14	-	150	38	112
With 20 or more employees.....do..	8	3	3	-	5	-	5
All employees:							
Number.....	871	256	256	-	615	126	489
Payroll.....\$1,000..	4,581	1,570	1,570	-	3,011	689	2,322
Value added in mining.....do..	9,326	2,820	2,820	-	6,506	1,452	5,054
Value of shipments and receipts.....do..	13,246	4,238	4,238	-	9,008	2,210	6,798
Capital expenditures.....do..	1,434	214	214	-	1,220	284	936
1492—Gypsum:							
Establishments.....number..	37	14	14	-	23	8	15
With 20 or more employees.....do..	6	4	4	-	2	1	1
All employees:							
Number.....	458	261	261	-	197	59	138
Payroll.....\$1,000..	2,406	1,527	1,527	-	879	310	569
Value added in mining.....do..	7,753	4,683	4,683	-	3,070	1,373	1,697
Value of shipments and receipts.....do..	10,160	5,862	5,862	-	4,298	1,502	2,796
Capital expenditures.....do..	1,279	500	500	-	779	144	635
1493—Mica:							
Establishments.....number..	33	7	7	-	26	13	13
With 20 or more employees.....do..	6	2	2	-	4	4	-
All employees:							
Number.....	398	158	158	-	240	202	38
Payroll.....\$1,000..	1,582	695	695	-	887	821	66
Value added in mining.....do..	3,925	1,812	1,812	-	2,113	1,894	219
Value of shipments and receipts.....do..	5,560	2,387	2,387	-	3,173	2,900	273
Capital expenditures.....do..	860	370	370	-	490	390	100
1494—Native asphalt and bitumens:							
Establishments.....number..	13	9	8	1	4	3	1
With 20 or more employees.....do..	4	4	3	1	-	-	-
All employees:							
Number.....	422	(D)	(D)	(D)	(D)	(D)	(D)
Payroll.....\$1,000..	2,241	(D)	(D)	(D)	(D)	(D)	(D)
Value added in mining.....do..	6,333	(D)	(D)	(D)	(D)	(D)	(D)
Value of shipments and receipts.....do..	8,509	(D)	(D)	(D)	(D)	(D)	(D)
Capital expenditures.....do..	1,081	(D)	(D)	(D)	(D)	(D)	(D)
1495—Pumice and pumicite:							
Establishments.....number..	85	13	10	3	72	40	32
With 20 or more employees.....do..	2	-	-	-	2	2	-
All employees:							
Number.....	247	50	37	13	197	131	66
Payroll.....\$1,000..	1,056	270	213	57	786	520	266
Value added in mining.....do..	4,198	1,322	1,202	120	2,876	1,856	1,020
Value of shipments and receipts.....do..	5,358	1,620	1,364	256	3,738	2,467	1,271
Capital expenditures.....do..	682	49	4	45	633	507	126
1496—Talc, soapstone, and pyrophyllite:							
Establishments.....number..	65	39	29	10	26	12	14
With 20 or more employees.....do..	9	8	8	-	1	1	-
All employees:							
Number.....	1,276	1,097	1,058	39	179	129	50
Payroll.....\$1,000..	6,627	5,795	5,634	161	832	545	287
Value added in mining.....do..	13,746	11,609	11,025	584	2,137	1,160	977
Value of shipments and receipts.....do..	17,534	14,956	14,275	681	2,578	1,505	1,073
Capital expenditures.....do..	1,148	850	736	114	298	187	111
1497—Natural abrasives, except sand:							
Establishments.....number..	23	7	5	2	16	5	11
With 20 or more employees.....do..	5	3	2	1	2	2	-
All employees:							
Number.....	294	214	(D)	(D)	80	(D)	(D)
Payroll.....\$1,000..	1,583	1,210	(D)	(D)	373	(D)	(D)
Value added in mining.....do..	4,125	3,253	(D)	(D)	872	(D)	(D)
Value of shipments and receipts.....do..	5,002	3,856	(D)	(D)	1,146	(D)	(D)
Capital expenditures.....do..	498	430	(D)	(D)	68	(D)	(D)

See footnotes at end of table.

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Type of ownership or control <sup>1</sup>				
	Corporate	Noncorporate			
		Total	Individual	Partnership	Cooperative and other
INDUSTRIES: 1963—Continued					
1481—Nonmetallic minerals services:					
Establishments <sup>2</sup> .....number..	52	112	78	31	3
With 20 or more employees.....do..	3	5	2	1	2
All employees:					
Number.....	382	489	328	70	91
Payroll.....\$1,000..	2,259	2,322	1,229	296	797
Value added in mining.....do..	4,272	5,054	3,049	671	1,334
Value of shipments and receipts.....do..	6,448	6,798	3,624	827	2,347
Capital expenditures.....do..	498	936	532	65	339
1492—Gypsum:					
Establishments.....number..	22	15	9	6	-
With 20 or more employees.....do..	5	1	1	-	-
All employees:					
Number.....	320	138	112	26	-
Payroll.....\$1,000..	1,837	569	471	98	-
Value added in mining.....do..	6,056	1,697	1,324	373	-
Value of shipments and receipts.....do..	7,364	2,796	2,517	279	-
Capital expenditures.....do..	644	635	278	357	-
1493—Mica:					
Establishments.....number..	20	13	10	2	1
With 20 or more employees.....do..	6	-	-	-	-
All employees:					
Number.....	360	38	34	(D)	(D)
Payroll.....\$1,000..	1,516	66	51	(D)	(D)
Value added in mining.....do..	3,706	219	141	(D)	(D)
Value of shipments and receipts.....do..	5,287	273	196	(D)	(D)
Capital expenditures.....do..	760	100	32	(D)	(D)
1494—Native asphalt and bitumens:					
Establishments.....number..	11	2	-	2	-
With 20 or more employees.....do..	3	1	-	1	-
All employees:					
Number.....	(D)	(D)	-	(D)	-
Payroll.....\$1,000..	(D)	(D)	-	(D)	-
Value added in mining.....do..	(D)	(D)	-	(D)	-
Value of shipments and receipts.....do..	(D)	(D)	-	(D)	-
Capital expenditures.....do..	(D)	(D)	-	(D)	-
1495—Pumice and pumicite:					
Establishments.....number..	50	35	18	17	-
With 20 or more employees.....do..	2	-	-	-	-
All employees:					
Number.....	168	79	60	19	-
Payroll.....\$1,000..	733	323	241	82	-
Value added in mining.....do..	3,058	1,140	798	342	-
Value of shipments and receipts.....do..	3,831	1,527	1,088	439	-
Capital expenditures.....do..	511	171	121	50	-
1496—Talc, soapstone, and pyrophyllite:					
Establishments.....number..	41	24	9	13	2
With 20 or more employees.....do..	9	-	-	-	-
All employees:					
Number.....	1,187	89	38	(D)	(D)
Payroll.....\$1,000..	6,179	448	243	(D)	(D)
Value added in mining.....do..	12,185	1,561	707	(D)	(D)
Value of shipments and receipts.....do..	15,780	1,754	747	(D)	(D)
Capital expenditures.....do..	923	225	100	(D)	(D)
1497—Natural abrasives, except sand:					
Establishments.....number..	10	13	7	6	-
With 20 or more employees.....do..	4	1	-	1	-
All employees:					
Number.....	235	59	22	37	-
Payroll.....\$1,000..	1,392	191	99	92	-
Value added in mining.....do..	3,593	532	332	200	-
Value of shipments and receipts.....do..	4,378	624	379	245	-
Capital expenditures.....do..	476	22	11	11	-



# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Establishments, total	Type of company organization <sup>1</sup>					
		Multi-unit			Single unit		
		Total	Corporate ownership or control	Noncorporate ownership	Total	Corporate ownership or control	Noncorporate ownership
INDUSTRIES: 1963—Continued							
1498—Peat:							
Establishments.....number..	109	6	5	1	103	33	70
With 20 or more employees.....do..	4	3	3	-	1	1	-
All employees:							
Number.....	504	177	(D)	(D)	327	(D)	(D)
Payroll.....\$1,000..	1,778	577	(D)	(D)	1,201	(D)	(D)
Value added in mining.....do..	5,626	3,201	(D)	(D)	2,425	(D)	(D)
Value of shipments and receipts.....do..	7,360	4,155	(D)	(D)	3,205	(D)	(D)
Capital expenditures.....do..	870	232	(D)	(D)	638	(D)	(D)
1499—Nonmetallic minerals, n.e.c.:							
Establishments.....number..	87	20	20	-	67	33	34
With 20 or more employees.....do..	18	13	13	-	5	5	-
All employees:							
Number.....	1,878	1,511	1,511	-	367	(D)	(D)
Payroll.....\$1,000..	11,201	9,716	9,716	-	1,485	(D)	(D)
Value added in mining.....do..	32,619	29,114	29,114	-	3,505	(D)	(D)
Value of shipments and receipts.....do..	42,963	37,723	37,723	-	5,240	(D)	(D)
Capital expenditures.....do..	5,511	5,036	5,036	-	475	(D)	(D)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available.  
(X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Figures are based on individual establishment reports received in the Census of Mineral Industries from operators of such establishments. Each establishment was classified in accordance with the principal mineral produced or for which development or exploration was undertaken or, in the case of mineral service establishments, the primary type of service performed. Hence, the statistics presented in this table should not be compared directly with the tabulations in which the entire company or corporation represents the reporting unit and is classified in a single industry, such as statistics on corporation income compiled by the Internal Revenue Service, United States Treasury Department. Mineral establishments were classi-

# General Statistics by Type of Company Organization and Ownership, and by Major Industry Group, 1963, 1958, and 1954, and by Industry, 1963—Continued

Industry code, major industry group, industry, and item	Type of ownership or control <sup>1</sup>				
	Corporate	Noncorporate			
		Total	Individual	Partnership	Cooperative and other
INDUSTRIES: 1963—Continued					
1498—Peat:					
Establishments.....number..	38	71	54	17	-
With 20 or more employees.....do..	4	-	-	-	-
All employees:					
Number.....	362	142	119	23	-
Payroll.....\$1,000..	1,367	411	339	72	-
Value added in mining.....do..	4,432	1,194	908	286	-
Value of shipments and receipts.....do..	5,882	1,478	1,171	307	-
Capital expenditures.....do..	595	275	216	59	-
1499—Nonmetallic minerals, n.e.c.:					
Establishments.....number..	53	34	28	6	-
With 20 or more employees.....do..	18	-	-	-	-
All employees:					
Number.....	(D)	(D)	51	(D)	-
Payroll.....\$1,000..	(D)	(D)	136	(D)	-
Value added in mining.....do..	(D)	(D)	403	(D)	-
Value of shipments and receipts.....do..	(D)	(D)	580	(D)	-
Capital expenditures.....do..	(D)	(D)	85	(D)	-

fied as part of a multiunit company when the company operated at least two establishments in the mineral industries or one establishment in the mineral industries and at least one other establishment in manufacturing, retail, wholesale, or service trade industries.

<sup>2</sup>Represents "county establishments" for operators of oil and gas field properties and for mineral services establishments. Such "county establishments" are obtained by allocating data from reports for larger areas on the basis of information contained in such reports by county for employment, production, receipts for services, and capital expenditures. This differs from the establishment count, shown without footnote or special designation in many places in the census reports, which represents merely the number of reports tabulated. For all mineral industries the number of reports tabulated was 38,651 as compared with the 67,399 "county establishments" shown above. In making the tabulation for the above table, however, each company filing only one report was placed in the single unit classification, even though several "county establishments" may have been included in that report.

<sup>3</sup>Excludes figures for Alaska and Hawaii.

<sup>4</sup>Not shown since the cost of supplies, purchased fuels and electric energy, contract work, and purchased machinery installed exceeded the sum of value of shipments and receipts and capital expenditures.



# Employment and Related Statistics

## Chapter 4

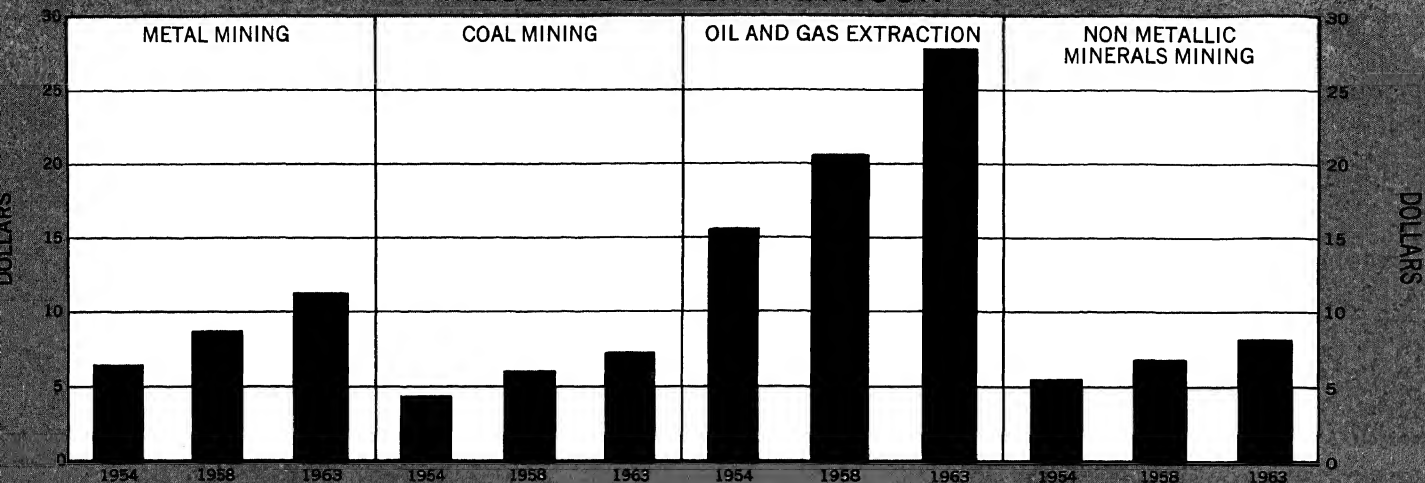
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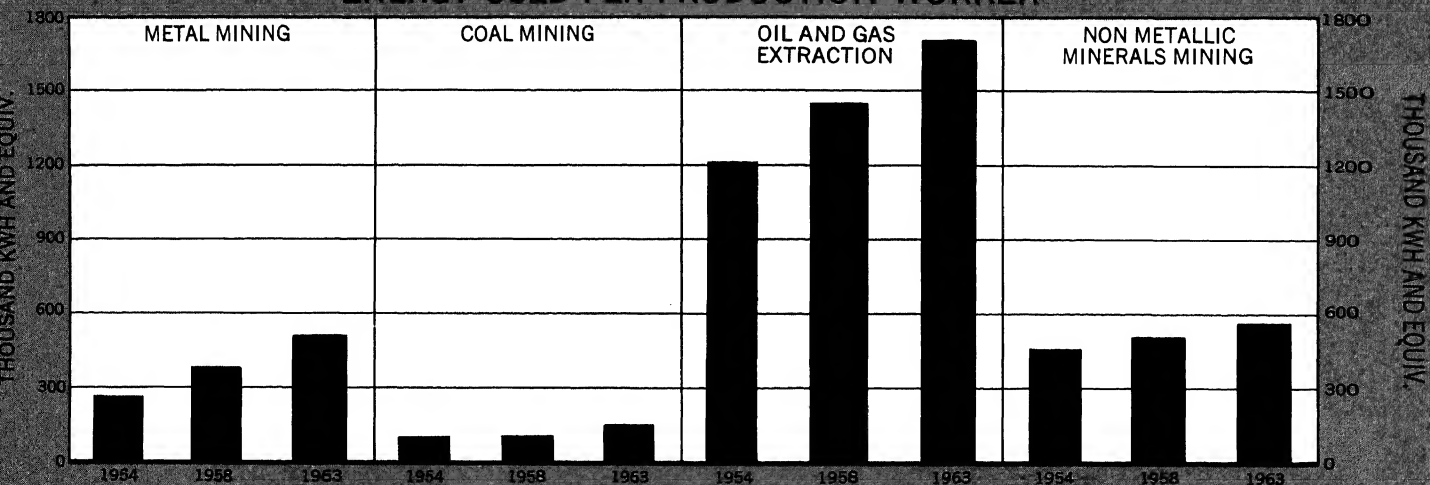
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# VALUE ADDED PER MAN-HOUR, AND ENERGY AND HORSEPOWER USED PER PRODUCTION WORKER IN MINING FOR MAJOR INDUSTRY GROUPS: 1963, 1958 AND 1954.

## VALUE ADDED PER MAN-HOUR



## ENERGY USED PER PRODUCTION WORKER



## HORSEPOWER PER PRODUCTION WORKER

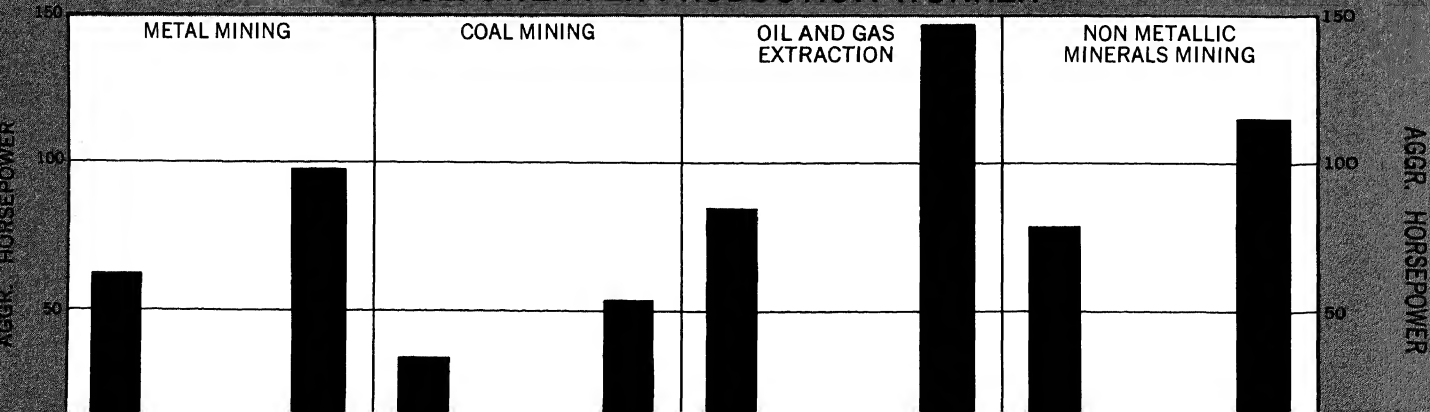


TABLE 1. Selected Employment Statistics by Industry Groups and Industries:  
1963, 1958, and 1954

Industry group, industry and year	Employees		Man-hours worked by production, development, and exploration workers							Value added per man-hour (dollars)	Energy used per production worker (1,000 kwh. equivalent)	Aggregate horsepower per production worker
	Total	Production, development, and exploration workers	Total		At mines				At preparation plants			
			All types of work	Development and exploration work only	Underground	Open pit <sup>1</sup>	Well operations	Surface (including mine shops and yards)				
(number)	(number)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(dollars)			
All mineral industries...1963..	615,572	481,466	972,983	157,914	207,772	153,384	375,033	72,090	164,485	16.35	906	110
1958..	733,905	565,356	1,080,445	<sup>2</sup> 177,895	260,779	<sup>3</sup> 146,596	415,708	<sup>3</sup> 75,150	<sup>3</sup> 182,212	12.39	717	(NA)
1954..	787,112	648,341	1,251,909	239,240	345,621	145,151	467,300	<sup>3</sup> 127,316	<sup>3</sup> 166,783	9.25	576	63
Metal mining.....1963..	77,210	62,182	125,663	9,860	43,942	26,704	(X)	25,198	29,819	11.29	507	98
1958 <sup>4</sup> ..	91,582	70,750	136,249	9,523	48,312	<sup>3</sup> 26,115	(X)	<sup>3</sup> 27,734	<sup>3</sup> 33,892	8.68	384	(NA)
1954..	101,210	82,715	170,497	20,780	68,345	31,842	(X)	39,454	30,856	6.59	262	63
Iron ores.....1963..	23,083	18,102	34,524	3,001	8,197	10,351	(X)	6,412	9,564	15.91	979	145
1958..	30,113	22,517	39,926	1,652	12,690	9,865	(X)	7,716	9,655	12.21	491	(NA)
1954..	34,170	28,216	53,288	8,419	19,956	12,671	(X)	13,374	7,287	8.18	210	64
Copper ores.....1963..	26,486	21,372	45,319	1,315	12,148	12,694	(X)	9,331	11,146	9.20	369	88
1958 <sup>5</sup> ..	27,642	20,898	41,021	1,672	10,438	10,691	(X)	8,127	11,765	6.50	490	(NA)
1954 <sup>5</sup> ..	27,813	21,544	46,676	5,173	13,880	11,174	(X)	11,165	10,457	7.17	430	72
Lead and zinc ores.....1963..	9,422	7,822	14,781	1,029	10,296	47	(X)	2,288	2,150	5.71	140	56
1958 <sup>5</sup> ..	11,227	8,728	16,734	1,491	11,118	22	(X)	3,551	2,043	4.40	132	(NA)
1954..	16,566	13,592	27,554	1,498	18,357	139	(X)	4,477	4,581	3.90	121	55
Lead ores.....1963..	4,320	3,401	5,948	354	4,489	15	(X)	1,043	401	5.72	114	61
1958..	6,883	5,460	10,397	1,141	7,048	17	(X)	2,223	1,109	4.62	121	(NA)
1954..	8,720	7,156	14,654	954	10,273	101	(X)	2,416	1,864	4.28	105	59
Zinc ores.....1963..	5,102	4,421	8,833	675	5,807	32	(X)	1,245	1,749	5.70	159	52
1958..	4,344	3,268	6,337	350	4,070	5	(X)	1,328	934	4.05	151	(NA)
1954..	7,846	6,436	12,900	544	8,084	38	(X)	2,061	2,717	3.46	139	55
Gold and silver ores.....1963..	4,216	3,585	7,605	1,026	4,369	435	(X)	2,090	711	6.45	251	67
1958..	4,415	3,841	8,230	989	4,195	1,355	(X)	1,688	992	5.36	( <sup>6</sup> )	(NA)
1954..	5,635	4,887	11,212	1,232	4,931	2,507	(X)	2,665	1,109	3.76	295	65
Lode gold.....1963..	2,397	2,091	4,544	553	2,604	106	(X)	1,397	437	4.69	155	40
1958 <sup>5</sup> ..	2,586	2,234	4,602	483	2,943	98	(X)	985	576	4.92	( <sup>6</sup> )	(NA)
1954..	3,060	2,670	5,988	893	<sup>5</sup> 3,365	115	(X)	<sup>5</sup> 1,734	774	3.67	240	51
Placer gold.....1963..	361	325	731	20	17	326	(X)	336	52	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )
1958..	840	753	1,882	154	2	1,250	(X)	383	247	( <sup>7</sup> )	( <sup>7</sup> )	(NA)
1954..	1,320	1,152	3,010	93	<sup>2</sup> 21	2,579	(X)	<sup>2</sup> 284	126	3.42	623	129
Silver ores.....1963..	1,458	1,169	2,330	453	1,748	3	(X)	357	222	9.40	117	49
1958..	989	854	1,746	352	1,250	7	(X)	320	169	5.94	129	(NA)
1954..	1,255	1,065	2,214	246	1,627	25	(X)	353	209	4.45	76	34
Bauxite.....1963..	552	414	751	7	197	144	(X)	264	146	23.25	565	70
1958..	705	502	905	24	238	153	(X)	322	192	17.05	( <sup>6</sup> )	(NA)
1954..	852	661	1,288	10	281	210	(X)	583	214	9.96	257	74
Ferroalloy ores.....1963..	3,102	2,627	4,867	351	2,710	272	(X)	429	1,456	13.60	206	60
1958 <sup>5</sup> ..	5,438	4,380	8,335	343	3,616	953	(X)	1,204	2,562	8.91	210	(NA)
1954 <sup>5</sup> ..	8,078	6,838	15,122	1,030	7,482	1,484	(X)	1,815	4,341	7.10	165	54
Manganese ores.....1963..	224	180	351	18	38	108	(X)	8	197	6.69	122	111
1958..	2,099	1,792	3,475	88	1,159	690	(X)	557	1,069	5.76	325	(NA)
1954..	2,604	2,266	4,293	260	1,677	894	(X)	402	1,320	4.22	211	47
Tungsten ores.....1963..	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	(X)	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )
1958..	638	508	977	113	388	22	(X)	106	461	8.36	( <sup>6</sup> )	(NA)
1954 <sup>5</sup> ..	2,987	2,635	6,327	651	3,683	451	(X)	691	1,502	6.44	141	59
Ferroalloy ores, n.e.c....1963..	<sup>8</sup> 2,878	<sup>8</sup> 2,447	<sup>8</sup> 4,516	<sup>8</sup> 333	<sup>8</sup> 2,672	<sup>8</sup> 164	(X)	<sup>8</sup> 421	<sup>8</sup> 1,259	<sup>8</sup> 14.18	<sup>8</sup> 212	<sup>8</sup> 56
1958 <sup>5</sup> ..	2,701	2,080	3,883	142	2,069	241	(X)	541	1,032	11.87	( <sup>6</sup> )	(NA)
1954..	2,487	1,937	4,502	119	2,122	139	(X)	722	1,519	10.78	145	57
Metal mining services.....1963..	2,206	1,891	4,018	<sup>9</sup> 2,417	( <sup>10</sup> )	<sup>10</sup> 1,231	(X)	<sup>10</sup> 2,787	( <sup>10</sup> )	6.16	<sup>11</sup> 167	98
1958 <sup>5</sup> ..	2,184	1,973	4,274	<sup>9</sup> 1,161	( <sup>10</sup> )	<sup>10</sup> 1,013	(X)	<sup>10</sup> 3,261	( <sup>10</sup> )	5.35	<sup>11</sup> 172	(NA)
1954..	3,059	2,863	6,519	<sup>9</sup> 1,873	( <sup>10</sup> )	<sup>10</sup> 2,740	(X)	<sup>10</sup> 3,779	( <sup>10</sup> )	4.10	<sup>11</sup> 125	53
Miscellaneous metal ores...1963..	8,143	6,369	13,798	714	6,025	1,530	(X)	1,597	4,646	15.21	449	85
1958 <sup>5</sup> ..	9,790	7,851	16,673	2,198	6,017	1,912	(X)	1,865	6,879	11.78	375	(NA)
1954 <sup>5</sup> ..	4,881	3,982	8,536	1,489	3,379	858	(X)	1,502	2,797	(NA)	431	61
Mercury ores.....1963..	316	279	610	56	326	69	(X)	67	148	4.21	194	68
1958..	652	569	1,223	84	649	165	(X)	143	266	5.80	227	(NA)
1954 <sup>5</sup> ..	453	372	841	73	572	30	(X)	104	135	3.99	210	31
Titanium ores.....1963..	997	846	1,721	-	-	553	(X)	362	806	8.73	446	79
1958..	962	706	1,234	7	-	319	(X)	186	729	10.33	603	(NA)
1954..	843	568	1,261	39	-	208	(X)	522	531	8.83	636	81
Uranium-radium-vanadium ores.....1963..	6,665	5,114	11,251	595	5,699	832	(X)	1,124	3,596	16.94	467	85
1958..	7,939	6,389	13,873	2,048	5,352	1,347	(X)	1,485	5,689	12.60	367	(NA)
1954..	3,467	2,994	6,227	1,329	2,764	562	(X)	793	2,108	(NA)	430	56
Metallic ores, n.e.c.....1963..	165	130	216	63	-	76	(X)	44	96	7.40	346	177
1958 <sup>5</sup> ..	237	187	343	59	16	81	(X)	51	195	5.38	241	(NA)
1954 <sup>5</sup> ..	118	98	207	48	43	58	(X)	83	23	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )

See footnotes at end of table.

**TABLE 1. Selected Employment Statistics by Industry Groups and Industries:  
1963, 1958, and 1954—Continued**

Code	Industry group, industry, and year	Employees		Man-hours worked by production, development, and exploration workers							Value added per man-hour (dollars)	Energy used per production worker (1,000 kwh. equivalent)	Aggregate horsepower per production worker
		Total	Production, development, and exploration workers	Total		At mines				At preparation plants			
				All types of work	Development and exploration work only	Underground	Open pit <sup>1</sup>	Well operations	Surface (including mine shops and yards)				
(number)	(number)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(dollars)				
11	Anthracite mining.....1963..	11,786	10,324	19,544	1,119	7,458	5,684	(X)	1,934	4,468	6.17	261	68
	.....1958..	22,813	20,047	30,867	2,390	15,402	6,530	(X)	3,227	5,708	5.33	194	(NA)
	.....1954..	37,462	33,026	48,266	441	27,958	7,721	(X)	6,600	5,987	4.08	218	46
1111	Anthracite.....1963..	10,692	9,331	17,758	1,064	7,403	3,973	(X)	1,914	4,468	6.22	262	62
	.....1958..	19,712	17,266	26,409	780	15,356	2,297	(X)	3,048	5,708	5.38	194	(NA)
	.....1954..	32,769	28,823	42,061	441	27,844	1,903	(X)	6,327	5,987	3.97	229	37
1112	Anthracite mining services.....1963..	1,094	993	1,786	955	1055	101,711	(X)	1020	(10)	5.61	11252	124
	.....1958..	3,101	2,781	4,458	91,610	(10)	104,296	(X)	10162	(10)	5.01	11192	(NA)
	.....1954..	4,693	4,203	6,205	92,334	(X)	5,985	(X)	10220	(10)	4.82	11148	103
12	Bituminous coal and lignite mining.....1963..	133,862	118,629	217,642	3,008	145,102	30,995	(X)	20,490	21,055	7.38	135	53
	.....1958..	187,963	163,730	268,170	3,739	184,742	31,749	(X)	27,055	24,624	6.01	91	(NA)
	.....1954..	219,206	199,970	326,457	2,347	234,219	29,071	(X)	363,167	(3)	4.35	77	32
1211	Bituminous coal.....1963..	132,046	116,975	214,421	2,592	144,694	28,869	(X)	19,992	20,866	7.36	133	52
	.....1958..	185,933	161,908	264,779	3,006	184,407	29,185	(X)	26,824	24,363	6.00	88	(NA)
	.....1954..	217,186	198,134	323,098	1,123	234,178	26,371	(X)	362,549	(3)	4.33	75	31
1212	Lignite.....1963..	512	441	884	40	11	502	(X)	182	189	13.38	317	172
	.....1958..	510	437	844	16	21	435	(X)	127	261	11.03	254	(NA)
	.....1954..	574	505	901	1	41	545	(X)	315	(3)	10.09	285	148
1213	Bituminous coal and lignite mining services...1963..	1,304	1,213	2,337	9376	10397	101,624	(X)	10316	(10)	7.18	11275	128
	.....1958..	1,520	1,385	2,547	9717	10314	102,129	(X)	10104	(10)	6.37	11396	(NA)
	.....1954..	1,446	1,331	2,458	91,223	(10)	102,155	(X)	10303	(10)	5.08	11288	123
13	Oil and gas extraction.....1963..	271,476	191,976	397,348	12139,631	(X)	(X)	372,893	(X)	24,455	27.73	1,716	147
	.....1958..	312,916	214,001	440,256	12159,350	(X)	(X)	413,309	(X)	26,947	20.53	1,451	(NA)
	.....1954 <sup>13</sup>	315,808	235,518	491,793	12207,203	(X)	(X)	463,991	(X)	27,862	15.61	1,211	85
1311	Crude petroleum and natural gas.....1963..	145,244	83,444	166,305	1229,418	(X)	(X)	166,305	(X)	(X)	54.21	1,752	171
	.....1958..	180,040	102,445	200,930	1236,359	(X)	(X)	200,930	(X)	(X)	36.53	1,342	(NA)
	.....1954 <sup>13</sup>	172,506	109,792	216,581	1251,787	(X)	(X)	216,581	(X)	(X)	28.30	1,290	83
	Crude petroleum.....1963..	125,842	71,707	142,847	1224,658	(X)	(X)	142,847	(X)	(X)	54.69	1,843	174
	.....1958 <sup>13</sup>	164,723	92,358	181,246	1232,938	(X)	(X)	181,246	(X)	(X)	37.65	1,389	(NA)
	.....1954 <sup>13</sup>	161,282	101,542	201,086	1248,392	(X)	(X)	201,086	(X)	(X)	28.55	1,344	85
	Natural gas.....1963..	19,402	11,737	23,458	124,760	(X)	(X)	23,458	(X)	(X)	51.30	1,196	148
	.....1958 <sup>13</sup>	15,317	10,087	19,684	123,421	(X)	(X)	19,684	(X)	(X)	26.24	910	(NA)
	.....1954 <sup>13</sup>	11,224	8,250	15,495	123,395	(X)	(X)	15,495	(X)	(X)	25.04	626	59
1321	Natural gas liquids.....1963..	13,859	11,939	24,455	(X)	(X)	(X)	(X)	(X)	24,455	31.16	13,240	326
	.....1958..	16,514	13,445	26,947	(X)	(X)	(X)	(X)	(X)	26,947	21.81	10,571	(NA)
	.....1954..	17,340	13,560	27,862	(X)	(X)	(X)	(X)	(X)	27,862	(NA)	8,366	214
138	Oil and gas field services.....1963..	112,373	96,593	206,588	12110,213	-	-	206,588	-	-	6.01	11255	105
	.....1958..	116,246	98,045	212,225	12122,991	-	-	212,225	-	-	5.22	11314	(NA)
	.....1954 <sup>13</sup>	125,889	112,131	247,275	12155,341	-	-	247,275	-	-	4.52	11267	72
1381	Drilling oil and gas wells.....1963..	55,416	50,333	106,266	1290,689	-	-	106,266	-	-	6.15	11362	104
	.....1958 <sup>13</sup>	59,411	52,274	109,470	12103,821	-	-	109,470	-	-	5.37	11433	(NA)
	.....1954 <sup>13</sup>	67,976	62,145	133,216	12126,050	-	-	133,216	-	-	4.68	11375	69
1382	Oil and gas exploration services.....1963..	8,683	7,232	16,246	1215,395	-	-	16,246	-	-	5.54	11194	121
	.....1958 <sup>13</sup>	9,557	7,559	16,695	1216,070	-	-	16,695	-	-	3.85	11126	(NA)
	.....1954..	11,488	10,010	23,978	1223,040	-	-	23,978	-	-	3.39	11194	93
1389	Oil and gas field services, n.e.c.....1963..	48,274	39,028	84,076	124,129	-	-	84,076	-	-	5.92	11149	104
	.....1958 <sup>13</sup>	47,278	38,212	86,060	123,100	-	-	86,060	-	-	5.30	11188	(NA)
	.....1954..	46,425	39,976	90,081	126,251	-	-	90,081	-	-	4.59	11144	72
14	Nonmetallic minerals mining.....1963..	121,238	98,355	212,786	4,296	11,270	1490,220	142,140	24,468	84,688	8.20	572	115
	.....1958..	118,631	96,825	204,910	52,893	12,323	382,202	2,399	317,141	390,845	6.78	501	(NA)
	.....1954..	113,441	97,112	214,896	9,692	15,099	76,517	3,369	17,833	102,078	5.50	451	79
1411	Dimension stone.....1963..	2,156	1,970	3,820	38	63	2,981	(X)	555	221	3.89	115	40
	.....1958..	2,306	2,055	3,690	55	8	2,965	(X)	654	63	3.54	(6)	(NA)
	.....1954..	3,224	3,068	5,893	21	848	4,493	(X)	552	-	2.57	46	31
	Dimension limestone.....1963..	326	286	568	1	1	484	(X)	23	60	5.19	80	63
	.....1958..	583	491	879	16	-	790	(X)	76	13	4.26	(6)	(NA)
	.....1954..	500	472	872	-	11	786	(X)	75	-	3.37	72	37
	Dimension granite.....1963..	824	773	1,645	31	7	1,404	(X)	174	60	3.96	176	36
	.....1958..	740	681	1,277	-	-	1,128	(X)	112	37	3.20	(6)	(NA)
	.....1954..	967	917	1,769	10	138	1,476	(X)	155	-	2.59	38	33
	Dimension stone, n.e.c.....1963..	1,006	911	1,607	6	55	1,093	(X)	358	101	3.35	75	36
	.....1958..	983	883	1,534	39	8	1,047	(X)	466	13	3.42	(6)	(NA)
	.....1954..	1,757	1,679	3,252	11	699	2,231	(X)	322	-	2.34	43	28
1421	Crushed and broken stone...1963..	43,236	36,186	80,834	1,239	2,686	38,420	(X)	9,496	30,232	7.20	272	118
	.....1958..	41,730	35,148	76,212	594	3,293	32,235	(X)	9,294	31,390	5.89	238	(NA)
	.....1954..	37,640	33,332	75,999	2,292	3,979	30,260	(X)	8,831	32,929	4.47	207	84

See footnotes at end of table.

**TABLE 1. Selected Employment Statistics by Industry Groups and Industries:  
1963, 1958, and 1954—Continued**

Code	Industry group, industry, and year	Employees		Man-hours worked by production, development, and exploration workers							Value added per man-hour (dollars)	Energy used per production worker (1,000 kwh. equivalent)	Aggregate horsepower per production worker
		Total	Production, development, and exploration workers	Total		At mines				At preparation plants			
				All types of work	Development and exploration work only	Underground	Open pit <sup>1</sup>	Well operations	Surface (including mine shops and yards)				
(number)	(number)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)					
1441	Nonmetallic minerals mining—Con.												
	Crushed and broken limestone.....1963..	31,095	26,331	59,365	1,087	2,253	29,270	(X)	6,799	21,043	6.88	246	122
	1958..	31,507	26,453	57,262	1,479	3,068	323,672	(X)	8,129	222,393	5.85	261	(NA)
	1954..	28,240	24,925	56,335	992	3,787	21,992	(X)	7,343	23,213	4.25	199	88
	Crushed and broken granite.....1963..	4,060	3,449	7,894	43	121	3,589	(X)	1,427	2,757	7.82	235	105
	1958..	3,309	2,906	6,442	40	-	2,891	(X)	489	3,062	5.20	132	(NA)
	1954..	2,550	2,344	5,607	473	3	2,543	(X)	455	2,606	3.96	120	72
	Crushed and broken stone, n.e.c.....1963..	8,081	7,300	13,575	109	312	5,561	(X)	1,270	6,432	7.26	354	107
	1958..	6,914	5,789	12,508	75	225	5,672	(X)	676	35,935	6.45	(6)	(NA)
	1954..	6,681	5,909	13,738	827	189	5,571	(X)	981	6,997	5.58	278	72
	Sand and gravel.....1963..	40,142	33,042	70,620	1,050	209	36,433	(X)	7,093	26,885	7.27	308	147
	1958..	37,159	30,729	66,674	835	129	1535,627	(X)	(15)	30,918	6.54	281	(NA)
	1954..	36,495	30,560	70,178	4,908	183	1529,759	(X)	(15)	40,236	5.09	297	105
	Construction sand and gravel subindustry.....1963..	36,394	30,024	64,014	982	164	34,129	(X)	6,432	23,289	7.17	265	153
	1958 <sup>16</sup>	34,275	28,367	61,927	825	129	1533,847	(X)	(15)	27,951	6.51	(6)	(NA)
	1954 <sup>16</sup>	34,119	28,450	65,675	4,896	144	1528,211	(X)	(15)	37,320	5.09	281	108
	Glass sand subindustry....1963..	1,570	1,223	2,738	9	-	968	(X)	183	1,587	8.27	800	83
	1958..	1,628	1,339	2,833	5	-	15784	(X)	(15)	2,049	7.30	721	(NA)
	1954..	1,295	1,144	2,505	3	35	15699	(X)	(15)	1,771	5.47	652	48
	Molding sand subindustry..1963..	927	764	1,546	42	12	687	(X)	60	787	8.30	1,156	106
	1958..	1,256	1,023	1,914	5	-	15996	(X)	(15)	918	6.32	372	(NA)
	1954..	1,081	966	1,998	9	4	15849	(X)	(15)	1,145	4.50	345	90
	Industrial sand, n.e.c., subindustry.....1963..	1,251	1,031	2,322	17	33	649	(X)	418	1,222	8.16	856	64
	145	Clay and related minerals...1963..	8,316	7,147	15,061	237	253	4,593	(X)	886	9,329	7.54	1,158
1958..	8,773	7,298	14,897	362	615	4,846	(X)	556	8,880	5.86	750	(NA)	
1954..	8,232	7,463	15,377	774	1,305	4,706	(X)	792	8,574	5.10	448	48	
1452	Bentonite.....1963..	811	644	1,508	13	49	341	(X)	104	1,014	11.56	953	65
1958..	688	543	1,140	22	16	363	(X)	10	751	10.72	1,061	(NA)	
1954..	634	578	1,340	16	4	415	(X)	8	913	12.20	638	63	
1453	Fire clay.....1963..	979	861	1,640	7	76	1,088	(X)	128	348	7.71	204	100
1958..	1,473	1,279	2,214	100	489	1,174	(X)	120	431	6.57	(6)	(NA)	
1954..	1,987	1,802	3,123	513	958	1,137	(X)	313	715	5.59	166	56	
1454	Fuller's earth.....1963..	758	653	1,363	13	-	198	(X)	8	1,157	6.66	1,145	54
1958..	652	527	1,145	3	-	146	(X)	89	910	5.20	(6)	(NA)	
1954..	564	510	1,109	42	-	278	(X)	-	831	3.77	580	46	
1455	Kaolin and ball clay.....1963..	3,346	2,916	6,123	182	121	1,282	(X)	276	4,444	8.14	873	60
1958..	3,394	2,722	5,675	215	26	1,712	(X)	242	3,695	5.46	526	(NA)	
1954..	3,148	2,820	6,159	140	116	1,404	(X)	427	4,212	4.10	402	34	
1456	Feldspar.....1963..	461	394	850	19	-	166	(X)	61	623	7.20	393	102
1958..	567	496	1,028	9	9	359	(X)	25	635	4.41	(6)	(NA)	
1954..	616	579	1,235	32	143	442	(X)	15	635	3.28	176	52	
1459	Clay and related minerals, n.e.c.....1963..	1,961	1,679	3,577	3	7	1,518	(X)	309	1,743	6.84	2,405	79
1958..	1,999	1,731	3,695	13	75	1,092	(X)	70	2,458	4.03	(6)	(NA)	
1954..	1,183	1,174	2,411	31	84	1,030	(X)	29	1,268	4.63	973	63	
147	Chemical and fertilizer minerals.....1963..	21,040	14,595	31,213	1,108	6,964	4,274	2,140	5,040	12,795	13.88	1,761	85
1958..	21,899	15,881	32,031	577	6,993	2,987	2,399	5,433	14,219	10.53	1,541	(NA)	
1954..	21,421	17,142	36,119	776	7,561	4,050	3,369	6,400	14,739	9.33	1,309	53	
1472	Barite.....1963..	1,434	911	1,887	14	157	567	(X)	143	1,020	5.89	297	66
1958..	929	781	1,588	28	240	429	(X)	50	869	7.13	(6)	(NA)	
1954..	1,125	1,036	2,403	6	469	674	(X)	58	1,202	5.85	260	65	
1473	Fluorspar.....1963..	804	682	1,346	20	651	56	(X)	167	472	6.59	485	35
1958..	1,235	1,044	2,105	96	913	111	(X)	149	932	6.01	(6)	(NA)	
1954..	1,260	997	2,001	50	826	116	(X)	199	860	4.95	381	49	
1474	Potash, soda, and borate minerals.....1963..	7,050	4,822	9,849	197	3,010	14253	(14)	1,024	5,562	15.85	1,717	68
1958..	6,661	4,590	9,212	110	2,466	14215	(14)	826	5,705	12.06	1,841	(NA)	
1954..	6,322	4,738	9,381	50	3,045	-	(X)	952	5,384	8.76	1,227	41	
1475	Phosphate rock.....1963..	5,624	3,996	9,047	828	761	3,016	(X)	1,243	4,027	10.49	1,156	131
1958..	5,393	3,955	8,255	228	510	1,944	(X)	1,370	4,431	7.80	789	(NA)	
1954..	5,440	4,579	10,119	303	691	2,941	(X)	1,560	4,927	6.14	653	78	
1476	Rock salt.....1963..	2,443	1,812	4,260	22	1,617	209	(X)	1,232	1,202	11.63	277	58
1958..	1,984	1,602	3,508	-	1,389	84	(X)	525	1,510	9.71	260	(NA)	
1954..	1,925	1,659	3,861	12	1,500	45	(X)	533	1,783	7.77	331	29	
1477	Sulfur.....1963..	2,603	1,600	3,264	25	-	9	2,140	1,090	25	30.74	7,239	94
1958..	3,677	2,303	4,644	63	-	13	2,399	2,205	27	20.25	5,132	(NA)	
1954..	4,095	3,077	6,229	113	-	33	3,369	2,807	20	19.93	4,177	52	

See footnotes at end of table.



**TABLE 1. Selected Employment Statistics by Industry Groups and Industries:**  
**1963, 1958, and 1954—Continued**

Code	Industry group, industry, and year	Employees		Man-hours worked by production, development, and exploration workers							Value added per man-hour (dollars)	Energy used per production worker (1,000 kwh. equivalent)	Aggregate horsepower per production worker
		Total	Production, development, and exploration workers	Total		At mines				At preparation plants			
				All types of work	Development and exploration work only	Underground	Open pit <sup>1</sup>	Well operations	Surface (including mine shops and yards)				
		(number)	(number)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)			
	Nonmetallic minerals mining—Con.												
1479	Chemical and fertilizer mining, n.e.c.....1963..	1,082	772	1,560	2	768	164	(X)	141	487	7.95	142	51
	.....1958..	2,020	1,606	2,719	68	1,475	191	(X)	308	745	3.58	57	(NA)
	.....1954..	1,254	1,056	2,125	242	1,030	241	(X)	291	563	6.90	150	36
1481	Nonmetallic minerals services.....1963..	871	806	1,575	9406	(10)	101,066	(X)	10509	(10)	5.92	11272	86
	.....1958..	1,109	1,037	1,893	9231	(10)	101,124	(X)	10769	(10)	3.28	11101	(NA)
	.....1954..	639	614	1,258	11635	(10)	10492	(X)	10766	(10)	3.88	11156	63
149	Miscellaneous minerals, n.e.c.....1963..	5,477	4,609	9,663	218	1,095	2,453	(X)	889	5,226	8.11	391	68
	.....1958..	5,654	4,679	9,511	5223	1,285	2,416	(X)	3435	35,375	6.59	( <sup>6</sup> )	(NA)
	.....1954..	5,787	4,930	10,070	286	1,223	2,755	(X)	492	5,600	4.75	224	25
1492	Gypsum.....1963..	458	383	807	1	84	429	(X)	91	203	9.61	319	84
	.....1958..	406	354	776	15	91	426	(X)	57	202	7.68	( <sup>6</sup> )	(NA)
	.....1954..	449	399	926	8	95	467	(X)	26	338	5.78	213	71
1493	Mica.....1963..	398	357	733	17	-	209	(X)	32	492	5.35	317	74
	.....1958..	727	649	1,204	47	237	335	(X)	49	583	4.13	( <sup>6</sup> )	(NA)
	.....1954..	710	668	1,196	40	297	276	(X)	21	602	( <sup>7</sup> )	87	( <sup>7</sup> )
1494	Native asphalt and bitumens.....1963..	422	357	728	46	242	135	(X)	156	195	8.70	210	95
	.....1958..	464	367	732	10	138	132	(X)	151	311	8.13	( <sup>6</sup> )	(NA)
	.....1954..	551	451	987	21	147	244	(X)	229	367	4.92	146	69
1495	Pumice and pumice.....1963..	247	222	428	5	6	239	(X)	21	162	9.81	284	117
	.....1958..	354	303	471	515	-	294	(X)	31	176	9.31	( <sup>6</sup> )	(NA)
	.....1954..	267	223	440	8	-	165	(X)	4	271	6.23	251	115
1496	Talc, soapstone, and pyrophyllite.....1963..	1,276	1,054	2,229	35	635	307	(X)	261	1,026	6.17	143	46
	.....1958..	1,294	1,123	2,289	51	530	278	(X)	81	1,400	5.14	( <sup>6</sup> )	(NA)
	.....1954..	1,471	1,297	2,778	138	506	540	(X)	88	1,644	3.41	103	28
1497	Natural abrasives, except sand.....1963..	294	216	466	-	27	77	(X)	31	331	8.85	324	79
	.....1958..	229	204	408	-	-	101	(X)	5	302	6.49	( <sup>6</sup> )	(NA)
	.....1954..	218	197	403	2	2	80	(X)	3	318	7.02	452	56
1498	Peat.....1963..	504	442	948	8	4	409	(X)	106	429	5.93	188	59
	.....1958..	389	335	613	41	-	311	(X)	11	291	5.94	( <sup>6</sup> )	(NA)
	.....1954..	353	321	637	11	-	407	(X)	24	206	2.83	271	74
1499	Nonmetallic minerals, n.e.c.....1963..	1,878	1,578	3,324	106	97	648	(X)	191	2,388	9.81	714	66
	.....1958..	1,791	1,344	3,018	44	289	539	(X)	80	2,110	7.74	( <sup>6</sup> )	(NA)
	.....1954..	1,768	1,374	2,703	58	176	576	(X)	97	1,854	6.45	451	55

Note: See Introduction for an explanation of column captions.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
 n.e.c. Not elsewhere classified.

<sup>1</sup>Includes figures for floating equipment, for anthracite culm bank recovery, and for bituminous coal auger mining.

<sup>2</sup>Man-hours for development and exploration in oil and gas extraction in Alaska are not available separately and are excluded.

<sup>3</sup>For 1958, except for placer gold and bituminous coal, surface and preparation plant man-hours in Alaska and Hawaii are included with those for open pit. For 1954, preparation plant man-hours for bituminous coal are included with those for surface.

<sup>4</sup>Metal mining total includes, but industry detail excludes data for metal mines in Alaska other than iron ores and placer gold in 1958 and lode gold and placer gold in 1954.

<sup>5</sup>Excludes figures for Alaska and Hawaii.

<sup>6</sup>Not shown since the undistributed fuels cost amounted to over 40 percent of the total cost of purchased fuels.

<sup>7</sup>Not shown since the number of proprietors and firm members performing manual labor exceeds one-third of the number of production, development, and exploration workers.

<sup>8</sup>Figures for tungsten ores are included with those for ferroalloy ores, n.e.c.

<sup>9</sup>Represents man-hours devoted to exploration work, including geophysical and other exploratory surveying, prospect and test drilling, and to stripping overburden only.

<sup>10</sup>Somewhat different detail was reported for service establishments. The figures shown under "Open-pit" represent those reported for stripping overburden and for mining minerals for the account of others. The figures shown under "Surface" represent exploration work, including geophysical and other exploratory surveying, and such other services as sinking mine shafts, driving mine tunnels, and drilling, excavating, shop work, and hauling from mine to preparation plant. For coal mining separate figures are shown under "Underground" for such services as drilling, shop work, shaft sinking, and mine tunnelling.

<sup>11</sup>Excludes energy furnished without charge by operators of mineral properties.

<sup>12</sup>Represents man-hours for drilling wells and rig building and for exploration work (except drilling). For 1958, see also footnote 2.

<sup>13</sup>Oil and gas extraction total includes, but industry detail excludes, figures for Alaska.

<sup>14</sup>Man-hours at wells in the potash, soda, and borate minerals industry are included with those for open-pit.

<sup>15</sup>Figures for "Surface" are included with those for "Open pit".

<sup>16</sup>Includes figures for the Industrial Sand, N.E.C., Subindustry.

TABLE 2. Monthly Employment by Industry Groups and Industries: 1963

Code	Industry group and industry	Number of production, development, and exploration workers												
		Average for the year	January	February	March	April	May	June	July	August	September	October	November	December
	All mineral industries.....	481,466	(NA)	(NA)	471,723	(NA)	482,506	(NA)	(NA)	487,624	(NA)	(NA)	482,621	(NA)
10	Metal mining.....	62,182	(NA)	(NA)	60,842	(NA)	62,745	(NA)	(NA)	63,072	(NA)	(NA)	61,693	(NA)
1011	Iron ores.....	18,102	15,012	15,612	16,261	17,108	18,906	19,065	19,161	19,306	19,379	18,743	17,889	16,981
1021	Copper ores.....	21,372	(NA)	(NA)	21,570	(NA)	21,298	(NA)	(NA)	21,185	(NA)	(NA)	21,436	(NA)
1031	Lead and zinc ores.....	7,822	(NA)	(NA)	7,927	(NA)	7,752	(NA)	(NA)	7,747	(NA)	(NA)	7,885	(NA)
	Lead ores subindustry.....	3,401	(NA)	(NA)	3,554	(NA)	3,350	(NA)	(NA)	3,383	(NA)	(NA)	3,347	(NA)
	Zinc ores subindustry.....	4,421	(NA)	(NA)	4,373	(NA)	4,402	(NA)	(NA)	4,364	(NA)	(NA)	4,538	(NA)
104	Gold and silver ores.....	3,585	(NA)	(NA)	3,438	(NA)	3,602	(NA)	(NA)	3,612	(NA)	(NA)	3,621	(NA)
1042	Lode gold.....	2,091	(NA)	(NA)	2,074	(NA)	2,076	(NA)	(NA)	2,053	(NA)	(NA)	2,116	(NA)
1043	Placer gold.....	325	(NA)	(NA)	277	(NA)	351	(NA)	(NA)	359	(NA)	(NA)	300	(NA)
1044	Silver ores.....	1,169	(NA)	(NA)	1,087	(NA)	1,175	(NA)	(NA)	1,200	(NA)	(NA)	1,205	(NA)
1051	Bauxite.....	414	(NA)	(NA)	409	(NA)	400	(NA)	(NA)	428	(NA)	(NA)	418	(NA)
106	Ferroalloy ores.....	2,627	(NA)	(NA)	2,673	(NA)	2,515	(NA)	(NA)	2,526	(NA)	(NA)	2,531	(NA)
1062	Manganese ores.....	180	175	162	171	182	178	173	178	182	184	181	180	180
1064	Tungsten ores and ferroalloy													
1069	ores, n.e.c.....	2,447	(NA)	(NA)	2,502	(NA)	2,337	(NA)	(NA)	2,344	(NA)	(NA)	2,351	(NA)
1081	Metal mining services.....	1,891	1,781	1,704	1,799	1,841	1,843	1,889	2,154	2,063	2,048	2,014	1,864	1,882
109	Miscellaneous metal ores.....	6,369	7,179	6,918	6,765	6,395	6,429	6,253	6,149	6,205	6,067	6,091	6,049	5,879
1092	Mercury ores.....	279	257	272	301	279	280	249	259	263	232	238	257	238
1093	Titanium ores.....	846	844	838	839	848	860	873	870	861	849	841	822	828
1094	Uranium-radium-vanadium ores.....	5,114	5,961	5,691	5,512	5,118	5,139	4,969	4,861	4,940	4,828	4,865	4,860	4,700
1099	Metalliferous ores, n.e.c.....	130	117	117	113	150	150	162	159	141	158	147	110	113
11	Anthracite mining.....	10,324	10,679	10,618	10,374	10,105	9,983	9,917	9,802	10,294	10,348	10,424	10,645	10,682
1111	Anthracite.....	9,331	9,691	9,633	9,391	9,125	9,025	8,949	8,834	9,297	9,321	9,390	9,611	9,664
1112	Anthracite mining services.....	993	988	985	983	980	958	968	968	997	1,027	1,034	1,034	1,018
12	Bituminous coal and lignite mining.....	118,629	118,705	120,101	118,952	117,715	117,678	117,539	116,588	117,324	118,906	120,591	120,580	121,675
1211	Bituminous coal.....	116,975	117,073	118,447	117,330	116,115	116,039	115,883	114,958	115,689	117,256	118,926	118,846	120,000
1212	Lignite.....	441	481	476	469	427	431	410	401	402	413	434	465	463
1213	Bituminous coal mining services.....	1,213	1,151	1,178	1,153	1,173	1,208	1,246	1,229	1,233	1,237	1,231	1,269	1,212
13	Oil and gas extraction.....	191,976	(NA)	(NA)	191,573	(NA)	192,061	(NA)	(NA)	193,478	(NA)	(NA)	190,449	(NA)
1311	Crude petroleum and natural gas.....	83,444	(NA)	(NA)	84,387	(NA)	83,259	(NA)	(NA)	84,250	(NA)	(NA)	81,641	(NA)
	Crude petroleum subindustry.....	71,707	(NA)	(NA)	72,847	(NA)	71,765	(NA)	(NA)	72,458	(NA)	(NA)	70,205	(NA)
	Natural gas subindustry.....	11,737	(NA)	(NA)	11,540	(NA)	11,494	(NA)	(NA)	11,792	(NA)	(NA)	11,436	(NA)
1321	Natural gas liquids.....	11,939	(NA)	(NA)	11,986	(NA)	11,995	(NA)	(NA)	12,036	(NA)	(NA)	11,640	(NA)
138	Oil and gas field services.....	96,593	(NA)	(NA)	95,200	(NA)	96,807	(NA)	(NA)	97,192	(NA)	(NA)	97,168	(NA)
1381	Drilling oil and gas wells.....	50,333	(NA)	(NA)	49,529	(NA)	50,712	(NA)	(NA)	50,041	(NA)	(NA)	51,048	(NA)
1382	Oil and gas exploration services.....	7,232	(NA)	(NA)	6,708	(NA)	7,319	(NA)	(NA)	7,577	(NA)	(NA)	7,322	(NA)
1389	Oil and gas field services, n.e.c.....	39,028	(NA)	(NA)	38,963	(NA)	38,776	(NA)	(NA)	39,574	(NA)	(NA)	38,798	(NA)
14	Nonmetallic minerals mining.....	98,355	(NA)	(NA)	89,982	(NA)	100,041	(NA)	(NA)	103,456	(NA)	(NA)	99,254	(NA)
1411	Dimension stone.....	1,970	(NA)	(NA)	1,747	(NA)	2,020	(NA)	(NA)	2,144	(NA)	(NA)	1,930	(NA)
	Dimension limestone subindustry.....	286	(NA)	(NA)	197	(NA)	301	(NA)	(NA)	364	(NA)	(NA)	275	(NA)
	Dimension granite subindustry.....	773	(NA)	(NA)	730	(NA)	790	(NA)	(NA)	835	(NA)	(NA)	746	(NA)
	Dimension stone, n.e.c., subindustry.....	911	(NA)	(NA)	820	(NA)	929	(NA)	(NA)	945	(NA)	(NA)	909	(NA)
1421	Crushed and broken stone.....	36,186	(NA)	(NA)	32,142	(NA)	37,312	(NA)	(NA)	39,023	(NA)	(NA)	36,279	(NA)
	Crushed and broken limestone subindustry.....	26,331	(NA)	(NA)	23,051	(NA)	27,164	(NA)	(NA)	28,296	(NA)	(NA)	26,559	(NA)
	Crushed and broken granite subindustry.....	3,449	(NA)	(NA)	3,439	(NA)	3,566	(NA)	(NA)	3,544	(NA)	(NA)	3,244	(NA)
	Crushed and broken stone, n.e.c., subindustry.....	6,406	(NA)	(NA)	5,652	(NA)	6,582	(NA)	(NA)	7,183	(NA)	(NA)	6,476	(NA)
1441	Sand and gravel.....	33,042	(NA)	(NA)	29,400	(NA)	33,385	(NA)	(NA)	34,998	(NA)	(NA)	34,067	(NA)
	Construction sand and gravel subindustry.....	30,024	(NA)	(NA)	26,482	(NA)	30,363	(NA)	(NA)	31,946	(NA)	(NA)	30,998	(NA)
	Glass sand subindustry.....	1,223	(NA)	(NA)	1,208	(NA)	1,232	(NA)	(NA)	1,231	(NA)	(NA)	1,213	(NA)
	Molding sand subindustry.....	764	(NA)	(NA)	731	(NA)	781	(NA)	(NA)	799	(NA)	(NA)	755	(NA)
	Industrial sand, n.e.c., subindustry.....	1,031	(NA)	(NA)	979	(NA)	1,009	(NA)	(NA)	1,022	(NA)	(NA)	1,101	(NA)
145	Clay and related minerals.....	7,147	6,846	6,860	6,948	7,185	7,202	7,245	7,159	7,169	7,132	7,204	7,174	7,161
1452	Bentonite.....	644	584	578	592	619	633	647	668	690	668	653	653	661
1453	Fire clay.....	861	854	840	845	838	851	853	870	882	890	863	867	864
1454	Fuller's earth.....	653	620	646	677	680	682	647	637	631	613	634	614	611
1455	Kaolin and ball clay.....	2,916	2,784	2,790	2,821	2,881	2,880	2,918	2,943	2,938	2,947	3,000	3,001	2,987
1456	Feldspar.....	394	406	403	406	410	400	401	389	390	373	380	373	373
1459	Clay and related minerals, n.e.c.....	1,679	1,598	1,603	1,607	1,757	1,756	1,779	1,652	1,638	1,641	1,674	1,666	1,651

See footnotes at end of table.

TABLE 2. Monthly Employment by Industry Groups and Industries: 1963—Continued

Code	Industry group and industry	Number of production, development, and exploration workers												
		Average for the year	January	February	March	April	May	June	July	August	September	October	November	December
	NONMETALLIC MINERALS MINING— Continued													
147	Chemical and fertilizer minerals.....	14,595	(NA)	(NA)	14,570	(NA)	14,631	(NA)	(NA)	14,536	(NA)	(NA)	14,613	(NA)
1472	Barite.....	911	902	890	964	951	953	967	938	873	857	820	853	791
1473	Fluorspar.....	682	656	651	655	678	688	699	716	706	677	683	688	692
1474	Potash, soda, and borate minerals....	4,822	4,825	4,797	4,861	4,906	4,836	4,801	4,805	4,792	4,728	4,728	4,800	4,779
1475	Phosphate rock.....	3,996	(NA)	(NA)	3,856	(NA)	4,011	(NA)	(NA)	4,048	(NA)	(NA)	4,047	(NA)
1476	Rock salt.....	1,812	1,915	1,900	1,862	1,748	1,751	1,771	1,762	1,759	1,768	1,811	1,869	1,898
1477	Sulfur.....	1,600	1,625	1,609	1,598	1,580	1,601	1,588	1,579	1,595	1,567	1,587	1,596	1,593
1479	Chemical-fertilizer mining, n.e.c....	772	775	771	774	778	791	766	758	763	756	756	760	758
1481	Nonmetallic minerals services.....	806	709	705	730	739	794	842	797	817	719	870	761	797
149	Miscellaneous minerals, n.e.c.....	4,609	4,196	4,262	4,445	4,648	4,697	4,656	4,659	4,769	4,536	4,435	4,430	4,308
1492	Gypsum.....	383	350	350	356	373	394	384	398	398	393	389	383	382
1493	Mica.....	357	316	322	324	329	343	333	336	364	331	320	335	321
1494	Native asphalt and bitumens.....	357	353	361	366	367	360	367	358	360	350	339	343	342
1495	Pumice and pumicite.....	222	197	196	201	212	226	247	255	249	236	224	208	202
1496	Talc, soapstone and pyrophyllite....	1,054	957	966	997	1,045	1,089	1,069	1,058	1,095	1,044	1,020	1,045	999
1497	Natural abrasives.....	216	217	215	222	209	212	218	221	224	213	209	205	199
1498	Peat.....	442	263	312	444	567	510	447	412	412	409	425	379	337
1499	Nonmetallic minerals, n.e.c.....	1,578	1,543	1,540	1,535	1,546	1,563	1,591	1,621	1,667	1,560	1,509	1,532	1,526

Standard Notes: - Represents zero.  
n.e.c. Not elsewhere classified.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

# General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963

Payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
Industries, total.....	38,651	615,572	3,742,469	481,466	972,983	2,679,515	15,910,015	21,620,538	3,263,615
.....	1,614	77,210	515,207	62,182	125,663	383,671	1,418,217	2,128,246	230,944
.....	1,069	11,786	58,835	10,324	19,544	49,889	120,540	236,511	15,111
and lignite mining.....	6,305	133,862	762,263	118,629	217,642	650,955	1,606,688	2,396,419	218,340
ation.....	21,242	271,476	1,744,711	191,976	397,348	1,093,048	11,019,796	14,512,459	2,551,692
als mining.....	8,421	121,238	661,453	98,355	212,786	501,952	1,744,774	2,346,903	247,528
.....	208	23,083	161,571	18,102	34,524	112,781	549,305	762,234	96,644
.....	16	485	3,029	420	749	2,308	69,842	75,619	869
.....	35	5,907	40,475	4,841	9,557	30,535	248,511	345,883	23,068
.....	27	3,427	23,170	3,099	6,164	20,601	89,067	125,152	9,204
.....	35	4,124	25,866	3,605	6,609	21,582	74,798	108,004	7,872
.....	20	2,403	15,109	2,097	3,747	12,432	33,123	47,593	1,603
.....	9	1,104	7,241	1,009	1,939	6,281	13,180	17,815	398
.....	7	2,136	14,311	1,863	3,577	11,858	22,252	35,843	1,625
.....	3	293	1,961	268	512	1,748	2,484	1,849	39,987
.....	2	97	591	74	140	375	655	899	34
.....	2	289	2,035	236	378	1,543	1,703	2,633	460
over.....	10	2,818	27,783	590	1,152	3,518	( <sup>3</sup> )	944	11,524
uted <sup>2</sup> .....	42								
.....	160	26,486	187,307	21,372	45,319	142,395	417,089	670,173	87,078
.....	2	1,321	9,504	1,167	2,422	8,088	55,896	70,675	17,582
.....	4	4,878	35,154	4,084	9,514	28,704	133,815	193,091	43,588
.....	9	3,688	24,656	3,182	6,385	20,335	71,880	144,688	6,664
.....	10	2,547	18,383	2,405	4,516	16,123	39,392	48,316	5,678
.....	9	3,306	32,306	3,735	8,215	27,660	59,736	87,199	7,501
.....	4	4,247	7,646	1,138	2,424	6,682	12,197	47,638	1,398
.....	5	1,315	7,372	268	521	1,234	1,745	2,305	235
.....	3	290	1,372	1,472	3,047	8,286	12,432	23,504	2,139
.....	6	1,755	10,580	3,260	6,958	21,265	26,994	40,647	433
.....	5	3,748	25,244	3,260	6,958	21,265	26,994	40,647	433
.....	27	598	3,881	549	1,119	3,471	3,293	12,021	928
over.....	27	2,099	18,581	112	198	547	( <sup>3</sup> )	89	932
uted <sup>2</sup> .....	76								
.....	205	9,422	49,337	7,822	14,781	37,935	84,373	135,965	11,896
.....	4	6	4	6	12	4	86	103	32
.....	3	59	311	48	112	259	2,537	2,634	1,575
.....	18	744	4,131	694	1,346	3,824	15,506	16,665	2,561
.....	9	408	2,462	352	738	2,028	7,041	9,966	748
.....	20	857	4,429	663	1,292	3,216	9,815	28,998	1,493
.....	13	7,705	8,833	1,534	2,933	7,586	16,688	21,315	1,309
.....	10	706	3,907	638	1,242	3,368	6,210	8,921	531
.....	7	3,117	15,508	2,561	4,450	11,559	21,187	28,858	1,746
.....	3	41	173	38	82	161	211	534	6
.....	4	295	1,480	264	548	1,318	1,514	6,796	106
.....	31	1,037	4,958	902	1,804	4,028	3,451	10,527	1,219
over.....	31	447	3,141	122	222	584	127	648	570
uted <sup>2</sup> .....	83								
.....	125	4,320	21,892	3,401	5,948	15,333	34,046	50,743	6,108
.....	3	7	17	7	14	17	158	168	21
.....	16	423	2,083	378	673	1,797	8,410	8,402	2,201
.....	13	283	1,309	218	388	933	3,047	12,773	947
.....	6	720	3,945	650	1,250	3,446	7,298	8,835	88
.....	5	2,293	10,642	1,844	3,039	7,635	14,682	18,607	1,444
.....	16	268	1,457	227	471	1,148	368	1,503	1,093
over.....	66	326	2,439	77	113	357	83	455	314
uted <sup>2</sup> .....									
.....	80	5,102	27,445	4,421	8,833	22,602	50,327	85,222	5,788
.....	4	58	298	47	110	246	2,465	2,569	1,586
.....	11	729	4,510	668	1,411	4,055	14,137	18,229	1,108
.....	7	574	3,120	445	904	2,283	6,768	16,225	546
.....	17	1,691	8,795	1,522	2,925	7,508	15,600	21,401	1,752
.....	5	865	5,039	755	1,493	4,085	6,716	10,785	308
.....	4	295	1,480	264	548	1,318	1,514	6,796	106
.....	15	769	3,501	675	1,333	2,880	3,083	9,024	126
over.....	17	121	702	45	109	227	44	193	256
uted <sup>2</sup> .....									
.....	201	2,397	13,861	2,091	4,544	11,422	21,312	26,632	2,859
.....	8	111	746	97	217	620	2,611	2,952	212
.....	5	49	332	46	89	315	758	919	112
.....	4	1,770	10,133	1,558	3,413	8,609	16,426	20,343	581
.....	7	150	930	143	327	860	1,122	2,145	221
.....	50	155	667	142	273	612	392	153	1,146
over.....	127	162	1,053	105	225	406	3	120	587
uted <sup>2</sup> .....									

end of table.

**TABLE 3. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963—Continued**

Code	Industry and ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
			Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
	Metal mining—Continued									
1043	Placer gold, total.....	158	361	2,134	325	731	1,763	5,810	7,532	989
	Less than 0.20.....	6	7	14	7	15	14	188	265	26
	0.20 to 0.39.....	11	147	904	136	338	820	3,532	4,332	118
	0.40 to 0.59.....	8	113	767	96	195	549	1,639	2,372	18
	0.60 to 0.79.....	3	6	20	6	14	20	29	55	1
	0.80 to 0.99.....	3	15	41	13	24	38	48	59	10
	1.00 and over.....	16	53	277	48	106	214	236	203	319
	Undistributed <sup>2</sup> .....	111	20	111	19	39	108	138	246	497
1044	Silver ores, total.....	107	1,458	8,802	1,169	2,330	6,834	21,904	26,060	3,338
	Less than 0.30.....	4	367	2,390	329	688	2,160	11,702	13,162	281
	0.30 and over.....	32	962	5,548	798	1,543	4,507	10,012	12,587	2,437
	Undistributed <sup>2</sup> .....	71	129	864	42	99	167	190	311	620
1051	Bauxite, total.....	17	552	3,442	414	751	2,285	17,464	21,491	269
	Less than 0.29.....	4	408	2,659	314	562	1,821	15,841	18,266	148
	0.30 to 0.39.....	4	59	315	46	89	238	847	1,716	43
	0.40 and over.....	6	69	329	54	100	224	657	1,362	76
	Undistributed <sup>2</sup> .....	3	16	139	-	-	2	119	147	2
1062	Manganese ores, total.....	17	224	1,138	180	351	820	2,348	7,228	386
	Less than 0.39.....	3	32	276	20	48	145	1,184	2,484	66
	0.40 to 0.49.....	3								
	0.60 to 0.69.....	1	143	754	118	234	586	2,239	4,744	214
	0.70 to 0.79.....	1								
	0.80 to 0.89.....	6								
	0.90 to 0.99.....	3	49	108	42	69	89	( <sup>3</sup> )	-	106
	Undistributed <sup>2</sup> .....	3								
1064	Tungsten ores and ferroalloy ores,									
1069	n.e.c., total.....	41	2,878	19,227	2,447	4,516	14,411	64,059	83,476	5,445
	0.10 to 0.19.....	1								
	0.20 to 0.29.....	1								
	0.30 to 0.39.....	5	2,638	17,634	2,299	4,170	13,518	63,542	83,172	3,598
	0.50 to 0.59.....	2								
	1.00 and over.....	5	132	773	124	301	747	802	304	1,304
	Undistributed <sup>2</sup> .....	27	108	820	24	45	146	( <sup>3</sup> )	-	543
1081	Metal mining services, total.....	83	2,206	13,923	1,891	4,018	11,485	24,736	32,360	3,039
	Less than 0.10.....	1								
	0.10 to 0.19.....	5	18	22	15	23	15	618	644	60
	0.20 to 0.29.....	6	11	64	11	30	64	266	403	18
	0.30 to 0.39.....	27	385	2,214	370	750	2,116	5,995	7,289	1,865
	0.40 to 0.49.....	14	284	2,115	268	659	1,998	4,656	6,439	321
	0.50 to 0.59.....	8	511	2,789	446	947	2,261	5,077	6,103	327
	0.60 to 0.69.....	5	129	976	111	207	863	1,428	2,055	30
	0.70 to 0.79.....	3	523	3,816	451	919	3,239	5,137	7,095	325
	0.80 to 0.89.....	4	239	1,221	205	458	873	1,508	2,225	75
	0.90 to 0.99.....	1								
	1.00 and over.....	3	12	38	10	18	34	36	77	12
	Undistributed <sup>2</sup> .....	6	94	668	4	7	22	15	30	6
1092	Mercury ores, total.....	49	316	1,839	279	610	1,562	2,569	3,658	317
	0.30 to 0.39.....	2								
	0.40 to 0.49.....	2	27	185	25	52	176	535	687	89
	0.60 to 0.69.....	2								
	0.70 to 0.79.....	2	184	1,094	166	378	927	1,524	2,131	166
	0.80 to 0.89.....	2								
	1.00 and over.....	7	76	433	70	146	404	421	707	37
	Undistributed <sup>2</sup> .....	32	29	127	18	34	55	89	133	25
1093	Titanium ores, total.....	8	997	6,401	846	1,721	5,131	15,021	22,033	2,171
	0.10 to 0.19.....	1								
	0.20 to 0.29.....	1								
	0.40 to 0.49.....	3	842	5,384	733	1,477	4,506	13,478	20,338	1,732
	0.50 to 0.59.....	1								
	0.90 to 0.99.....	1	155	1,017	113	244	625	1,543	1,695	439
	Undistributed <sup>2</sup> .....	1								
1094	Uranium-radium-vanadium ores, total.....	335	6,665	45,219	5,114	11,251	34,170	190,629	326,370	15,929
	Less than 0.10.....	22	336	2,122	282	574	1,770	29,761	38,460	558
	0.10 to 0.19.....	33	1,414	9,212	1,068	2,410	6,855	57,260	103,605	2,114
	0.20 to 0.29.....	59	2,346	17,409	1,772	4,140	13,455	69,642	111,763	3,251
	0.30 to 0.39.....	31	795	5,408	647	1,342	4,277	15,707	26,580	3,861
	0.40 to 0.49.....	24	197	1,090	191	413	1,064	2,469	5,645	544
	0.50 to 0.59.....	11	523	3,288	415	901	2,534	6,032	17,234	863
	0.60 to 0.69.....	10	207	836	186	292	738	1,309	1,950	180
	0.70 to 0.79.....	8	168	1,480	162	403	1,434	2,061	3,094	21
	0.80 to 0.89.....	1	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
	0.90 to 0.99.....	4	95	705	80	204	578	726	635	484
	1.00 and over.....	29	438	1,803	422	429	1,107	4,281	410,414	41,477
	Undistributed <sup>2</sup> .....	103	246	1,866	84	143	358	4,381	6,990	2,576
1099	Metallic ores, n.e.c., total.....	25	165	1,006	130	216	677	1,598	3,034	584
	0.10 to 0.19.....	1								
	0.20 to 0.29.....	1								
	0.40 to 0.49.....	3	53	454	38	108	307	1,091	1,604	247
	0.50 to 0.59.....	2								
	0.70 to 0.79.....	1								
	0.80 to 0.89.....	1	20	130	15	33	83	227	1,420	19
	1.00 and over.....	4	75	271	74	71	270	268	10	298
	Undistributed <sup>2</sup> .....	12	17	151	3	4	17	12	-	20

See footnotes at end of table.

**TABLE 3. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963—Continued**

Code	Industry and ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
			Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
11	Anthracite mining:									
1111	Anthracite, total.....	1,026	10,692	53,022	9,331	17,758	44,867	110,527	220,973	12,651
	Less than 0.10.....	16	33	64	33	56	64	1,082	1,338	54
	0.10 to 0.19.....	39	390	1,657	368	605	1,531	9,893	20,026	1,558
	0.20 to 0.29.....	70	647	3,087	586	1,100	2,858	12,271	29,083	646
	0.30 to 0.39.....	49	819	3,860	773	1,460	3,615	10,876	28,093	689
	0.40 to 0.49.....	60	1,367	7,290	1,267	2,566	6,650	16,178	37,117	1,812
	0.50 to 0.59.....	93	3,579	18,579	3,327	6,635	16,496	34,615	54,806	1,537
	0.60 to 0.69.....	59	1,320	6,636	1,249	2,235	6,181	10,095	18,984	700
	0.70 to 0.79.....	34	980	4,342	798	1,555	3,457	5,858	14,613	393
	0.80 to 0.89.....	25	340	1,510	311	471	1,405	1,805	2,479	129
	0.90 to 0.99.....	10	230	1,117	200	351	960	1,183	1,789	81
	1.00 and over.....	56	455	1,802	395	682	1,537	1,409	2,776	155
	No employees.....	507	-	-	-	-	-	5,491	9,852	3,034
	Undistributed <sup>2</sup> .....	8	532	3,078	24	42	113	(3)	17	1,863
1112	Anthracite mining services, total.....	43	1,094	5,813	993	1,786	5,022	10,013	15,538	2,460
	0.20 to 0.29.....	4	36	217	33	67	200	1,005	1,024	551
	0.30 to 0.39.....	4	34	168	31	58	156	515	587	19
	0.40 to 0.49.....	11	293	1,597	274	527	1,478	3,680	5,090	921
	0.50 to 0.59.....	6	117	654	107	221	532	1,216	1,764	387
	0.60 to 0.69.....	3	150	576	136	215	493	923	1,737	134
	0.70 to 0.79.....	5	130	838	119	211	687	1,095	1,754	4
	0.90 to 0.99.....	4	206	987	170	250	739	1,067	1,784	-
	1.00 and over.....	4	128	776	123	237	737	512	1,798	444
	No employees.....	2	-	-	-	-	-	-	-	-
12	Bituminous coal and lignite mining:									
1211	Bituminous coal, total.....	6,115	132,046	752,491	116,975	214,421	642,338	1,578,078	2,358,326	210,835
	Less than 0.10.....	117	617	1,473	588	946	1,324	24,360	37,428	13,580
	0.10 to 0.19.....	253	2,710	16,390	2,478	4,912	14,955	98,516	135,817	13,877
	0.20 to 0.29.....	516	8,866	55,539	7,957	15,788	49,227	215,338	311,654	37,810
	0.30 to 0.39.....	576	17,754	111,869	16,233	31,341	99,714	313,940	450,075	30,071
	0.40 to 0.49.....	692	22,639	138,215	20,804	39,255	122,703	309,178	438,164	38,292
	0.50 to 0.59.....	916	32,748	172,568	30,057	52,890	156,658	318,690	468,893	22,407
	0.60 to 0.69.....	758	17,986	103,734	16,523	30,743	91,311	160,545	252,159	15,876
	0.70 to 0.79.....	415	10,398	52,690	9,612	17,153	48,870	73,421	124,139	6,672
	0.80 to 0.89.....	294	5,030	24,386	4,549	8,114	21,472	28,876	51,370	11,054
	0.90 to 0.99.....	128	2,904	13,891	2,639	4,472	12,406	14,823	25,513	4,778
	1.00 and over.....	526	5,675	24,553	5,093	8,053	21,143	19,067	41,320	5,441
	Undistributed <sup>2</sup> .....	924	4,719	37,183	442	754	2,555	1,324	21,794	10,977
1212	Lignite, total.....	59	512	2,760	441	884	2,245	11,830	14,112	4,633
	Less than 0.10.....	4	-	-	-	-	-	-	-	-
	0.10 to 0.19.....	4	144	957	122	266	780	6,994	7,551	127
	0.20 to 0.29.....	6	-	-	-	-	-	-	-	-
	0.30 to 0.39.....	7	213	1,000	186	334	777	3,301	4,549	(D)
	0.40 to 0.49.....	6	114	626	92	200	516	1,330	1,621	(D)
	0.50 to 0.59.....	3	10	35	10	20	35	54	90	13
	0.60 to 0.69.....	4	-	-	-	-	-	-	-	-
	0.70 to 0.79.....	1	15	72	15	31	72	94	142	-
	0.80 to 0.89.....	2	-	-	-	-	-	-	-	-
	1.00 and over.....	5	16	65	16	33	65	43	113	3
	Undistributed <sup>2</sup> .....	15	-	5	-	-	-	14	46	(D)
1213	Bituminous coal mining services, total.....	131	1,304	7,012	1,213	2,337	6,372	16,780	23,981	2,872
	Less than 0.10.....	1	53	223	50	87	207	1,620	1,918	361
	0.10 to 0.19.....	10	178	840	169	303	792	3,084	3,860	334
	0.20 to 0.29.....	21	330	1,839	304	574	1,644	5,158	6,991	745
	0.30 to 0.39.....	19	216	1,027	205	367	930	2,236	3,241	617
	0.40 to 0.49.....	14	231	1,231	216	431	1,139	2,230	3,488	584
	0.50 to 0.59.....	8	79	411	74	155	384	633	1,312	32
	0.60 to 0.69.....	10	173	1,257	157	343	1,105	1,651	2,767	179
	0.70 to 0.79.....	1	-	-	-	-	-	-	-	-
	0.80 to 0.89.....	1	41	176	37	75	166	134	348	17
	0.90 to 0.99.....	6	-	-	-	-	-	-	-	-
	1.00 and over.....	6	3	8	1	2	5	34	56	3
	Undistributed <sup>2</sup> .....	6	-	-	-	-	-	-	-	-
13	Oil and gas extraction:									
1311	Crude petroleum and natural gas, total.....	14,378	145,244	1,016,431	83,444	166,305	494,910	9,016,372	9,893,763	2,209,930
	Less than 0.10.....	2,805	47,110	336,190	34,021	69,244	223,153	6,681,358	7,042,659	1,483,419
	0.10 to 0.19.....	2,393	28,965	183,791	21,424	42,544	129,326	1,403,658	1,573,571	336,608
	0.20 to 0.29.....	1,125	11,418	63,246	8,951	17,565	45,282	263,840	311,000	68,542
	0.30 to 0.39.....	685	7,179	40,137	5,202	10,040	25,404	118,716	147,270	35,849
	0.40 to 0.49.....	330	4,875	30,647	3,163	6,206	16,728	69,527	85,377	25,628
	0.50 to 0.59.....	436	2,232	11,043	1,626	2,958	6,876	20,127	28,823	8,699
	0.60 to 0.69.....	200	1,806	10,142	1,479	2,858	7,864	15,738	23,772	7,431
	0.70 to 0.79.....	129	1,526	8,401	1,087	2,198	5,182	11,309	15,575	4,719
	0.80 to 0.89.....	99	873	5,713	634	1,258	4,013	6,727	13,216	10,403
	0.90 to 0.99.....	33	764	4,358	493	981	2,624	4,657	6,803	1,787
	1.00 and over.....	717	5,527	31,839	2,791	5,341	14,117	14,156	26,557	13,285
	Undistributed <sup>2</sup> .....	5,426	32,969	290,924	2,573	5,112	14,341	406,559	619,140	213,560

See footnotes at end of table.

**TABLE 3. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963—Continued**

Code	Industry and ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
			Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
	Oil and gas extraction—Continued									
	Crude petroleum and natural gas—Con.									
	Crude petroleum subindustry, total...	12,326	125,842	892,632	71,707	142,847	426,811	7,812,956	8,600,086	1,906,498
	Less than 0.10.....	2,329	42,584	306,373	30,713	62,494	202,770	5,929,302	6,265,992	1,310,623
	0.10 to 0.19.....	2,178	25,008	155,961	18,686	36,960	111,787	1,198,097	1,348,137	294,345
	0.20 to 0.29.....	1,009	8,752	47,687	7,036	13,767	34,993	200,523	239,170	44,724
	0.30 to 0.39.....	601	5,665	32,113	4,221	8,228	20,645	96,216	124,540	28,494
	0.40 to 0.49.....	293	4,533	28,896	2,947	5,750	15,727	65,582	81,201	24,461
	0.50 to 0.59.....	373	1,863	9,173	1,387	2,495	5,628	16,713	25,015	7,535
	0.60 to 0.69.....	177	1,384	7,421	1,104	2,100	5,470	11,512	16,750	5,310
	0.70 to 0.79.....	107	1,273	6,876	891	1,788	4,083	9,307	12,675	2,486
	0.80 to 0.89.....	80	758	5,057	547	1,094	3,516	5,969	11,904	9,881
	0.90 to 0.99.....	27	383	2,390	215	441	1,212	2,525	3,607	1,400
	1.00 and over.....	571	3,737	21,873	1,837	3,471	8,886	10,545	21,465	7,970
	Undistributed <sup>2</sup> .....	4,581	29,902	268,812	2,123	4,259	12,094	266,665	449,630	169,269
	Natural gas subindustry, total.....	2,052	19,402	123,799	11,737	23,458	68,099	1,203,416	1,293,677	303,432
	Less than 0.10.....	476	4,526	29,817	3,308	6,750	20,383	752,056	776,667	172,796
	0.10 to 0.19.....	215	3,957	27,830	2,738	5,584	17,539	205,561	225,434	42,263
	0.20 to 0.29.....	116	2,666	15,559	1,915	3,798	10,289	63,317	71,830	23,818
	0.30 to 0.39.....	84	1,514	8,024	981	1,812	4,759	22,500	22,730	7,355
	0.40 to 0.49.....	37	342	1,751	216	456	1,001	3,945	4,176	1,167
	0.50 to 0.59.....	63	369	1,870	239	463	1,248	3,414	3,808	1,164
	0.60 to 0.69.....	23	422	2,721	375	758	2,394	4,226	7,022	2,121
	0.70 to 0.79.....	22	253	1,525	196	410	1,099	2,002	2,900	2,233
	0.80 to 0.89.....	19	115	656	87	164	497	758	1,312	522
	0.90 to 0.99.....	6	381	1,968	278	540	1,412	2,132	3,196	387
	1.00 and over.....	146	1,790	9,966	954	1,870	5,231	3,611	5,092	5,315
	Undistributed <sup>2</sup> .....	845	3,067	22,112	450	853	2,247	139,894	169,510	44,291
1321	Natural gas liquids, total.....	652	13,859	96,553	11,939	24,455	80,745	762,070	2,800,802	113,856
	Less than 0.10.....	153	3,407	23,811	3,062	6,208	21,015	463,119	1,386,692	52,533
	0.10 to 0.19.....	174	4,141	28,636	3,700	7,630	24,773	198,180	683,755	24,727
	0.20 to 0.29.....	87	1,725	12,163	1,548	3,121	10,585	49,533	254,201	5,691
	0.30 to 0.39.....	61	1,294	8,748	1,123	2,324	7,468	26,267	178,207	6,236
	0.40 to 0.49.....	25	782	5,802	713	1,436	5,093	12,644	79,706	1,014
	0.50 to 0.59.....	31	653	4,188	571	1,090	3,645	10,199	66,591	2,227
	0.60 to 0.69.....	18	241	1,597	214	460	1,404	2,472	15,334	431
	0.70 to 0.79.....	10	145	1,077	123	250	953	1,461	23,410	48
	0.80 to 0.89.....	10	127	850	115	267	752	991	17,292	214
	0.90 to 0.99.....	5	85	638	85	161	638	651	4,499	15
	1.00 and over.....	38	402	2,459	353	725	2,065	1,348	23,173	5,174
	Undistributed <sup>2</sup> .....	40	857	6,584	332	783	2,354	(3)	67,942	15,546
138	Oil and gas field services:									
1381	Drilling oil and gas wells, total...	2,836	55,416	318,150	50,333	106,266	281,064	653,337	979,316	148,026
	Less than 0.10.....	51	280	445	267	337	402	10,697	14,423	3,514
	0.10 to 0.19.....	81	433	1,789	376	879	1,549	11,982	12,869	983
	0.20 to 0.29.....	219	3,679	19,188	3,402	7,274	17,871	76,416	89,495	17,661
	0.30 to 0.39.....	323	7,419	42,506	6,777	13,672	37,494	120,456	158,700	17,689
	0.40 to 0.49.....	870	14,182	77,696	13,127	27,387	70,546	171,357	236,911	48,639
	0.50 to 0.59.....	361	11,984	68,888	10,997	24,035	61,266	128,884	197,167	27,213
	0.60 to 0.69.....	219	7,599	48,110	6,866	14,593	42,253	74,676	128,261	13,541
	0.70 to 0.79.....	124	3,079	18,399	2,764	5,980	16,757	28,812	45,803	4,418
	0.80 to 0.89.....	46	1,239	8,164	1,134	2,551	7,240	9,607	21,663	2,278
	0.90 to 0.99.....	36	1,012	6,044	869	2,106	5,063	6,476	14,534	970
	1.00 and over.....	166	3,245	17,930	2,944	6,163	15,487	12,367	39,967	4,507
	Undistributed <sup>2</sup> .....	340	1,265	8,991	810	1,289	5,136	5,607	19,523	6,613
1382	Oil and gas field exploration services, total.....	373	8,683	47,828	7,232	16,246	36,915	89,988	119,824	11,726
	Less than 0.10.....	13	16	37	16	31	37	1,190	2,111	112
	0.10 to 0.19.....	22	37	179	37	78	179	1,092	1,621	185
	0.20 to 0.29.....	28	643	3,836	563	842	3,013	15,126	17,828	1,906
	0.30 to 0.39.....	35	589	3,010	545	1,148	2,783	8,246	10,796	532
	0.40 to 0.49.....	66	1,872	10,459	1,585	3,739	8,086	22,820	27,910	2,470
	0.50 to 0.59.....	59	1,010	4,643	910	1,757	3,946	8,692	11,315	821
	0.60 to 0.69.....	38	1,405	8,058	1,170	2,748	6,612	12,643	16,998	2,134
	0.70 to 0.79.....	15	1,852	10,376	1,489	3,777	7,380	13,749	19,828	2,608
	0.80 to 0.89.....	16	897	4,534	755	1,754	3,969	5,374	9,246	640
	0.90 to 0.99.....	3	157	716	136	316	595	499	1,069	139
	1.00 and over.....	15	157	716	136	316	595	499	1,069	139
	Undistributed <sup>2</sup> .....	64	205	1,980	26	56	315	557	1,102	179
1389	Oil and gas field services, n.e.c., total.....	3,003	48,274	265,749	39,028	84,076	199,414	498,029	718,754	68,154
	Less than 0.10.....	97	157	183	145	286	170	4,170	5,023	691
	0.10 to 0.19.....	176	716	2,538	634	1,263	2,038	14,865	19,881	1,182
	0.20 to 0.29.....	304	1,365	5,883	1,151	2,234	4,771	23,117	26,115	2,481
	0.30 to 0.39.....	361	6,973	45,940	6,009	14,849	38,224	122,955	171,106	16,885
	0.40 to 0.49.....	476	10,918	63,383	8,601	18,699	43,471	135,605	175,210	16,847
	0.50 to 0.59.....	548	11,532	57,501	9,540	20,585	46,198	104,007	155,790	13,375
	0.60 to 0.69.....	276	5,878	29,396	4,964	9,585	23,510	45,247	56,281	4,342
	0.70 to 0.79.....	138	3,784	18,662	3,196	6,518	14,525	25,023	42,869	4,636
	0.80 to 0.89.....	81	1,503	7,750	1,289	2,786	6,496	9,214	12,470	1,014
	0.90 to 0.99.....	32	632	3,009	558	1,218	2,556	3,233	5,222	373
	1.00 and over.....	177	3,530	21,000	2,757	5,727	15,644	6,523	39,473	4,662
	Undistributed <sup>2</sup> .....	337	1,286	10,504	184	326	1,811	4,070	9,314	1,666

See footnotes at end of table.

**TABLE 3. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963—Continued**

Code	Industry and ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
			Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
	Oil and gas extraction—continued									
	Oil and gas field services—Continued									
	Oil and gas field services, n.e.c.—Continued									
	Survey, log, cement services subindustry, total.....	268	11,138	81,805	8,251	20,584	55,201	173,821	245,335	23,999
	Less than 0.10.....	12	18	38	15	34	32	784	908	38
	0.10 to 0.19.....	21	44	178	35	80	133	1,144	1,209	170
	0.20 to 0.29.....	35	249	1,438	176	423	1,085	5,363	5,873	358
	0.30 to 0.39.....	46	4,477	33,907	3,984	10,709	29,231	89,167	130,945	12,441
	0.40 to 0.49.....	43	3,629	26,898	2,578	5,513	14,790	55,178	76,164	7,728
	0.50 to 0.59.....	30	1,175	8,297	829	2,324	5,786	14,913	19,506	2,238
	0.60 to 0.69.....	14	110	656	97	191	1,016	1,319	59	59
	0.70 to 0.79.....	11	337	2,243	288	732	1,902	2,984	4,433	453
	0.80 to 0.89.....	10	117	628	81	191	430	733	847	28
	0.90 to 0.99.....	3	43	276	35	70	186	286	376	17
	1.00 and over.....	14			132	315	947	805	1,663	351
	Undistributed <sup>2</sup> .....	29	939	7,246	1	2	94	1,448	2,092	118
	Miscellaneous oil and gas field services subindustry, total.....	2,735	37,136	183,944	30,777	63,492	144,213	324,208	473,419	44,155
	Less than 0.10.....	85	139	145	130	252	138	3,386	4,115	653
	0.10 to 0.19.....	155	672	2,360	599	1,183	1,905	13,721	18,672	1,012
	0.20 to 0.29.....	269	1,116	4,445	975	1,811	3,686	17,754	20,242	2,123
	0.30 to 0.39.....	315	2,496	12,033	2,025	4,140	8,993	33,788	40,161	4,444
	0.40 to 0.49.....	433	7,289	36,485	6,023	13,186	28,681	80,427	99,046	9,119
	0.50 to 0.59.....	518	10,357	49,204	8,711	18,261	40,412	89,094	136,284	11,137
	0.60 to 0.69.....	262	5,768	28,740	4,867	9,394	22,925	44,231	54,962	4,283
	0.70 to 0.79.....	127	3,447	16,419	2,908	5,786	12,623	22,039	38,436	4,183
	0.80 to 0.89.....	71	1,386	7,122	1,208	2,595	6,066	8,481	11,623	986
	0.90 to 0.99.....	29	589	2,733	523	1,148	2,370	2,947	4,846	356
	1.00 and over.....	163			2,625	5,412	14,697	5,718	37,810	4,311
	Undistributed <sup>2</sup> .....	308	3,877	24,258	183	324	1,717	2,622	7,222	1,548
14	Nonmetallic minerals mining:									
1411	Dimension stones:									
	Dimension limestone subindustry, total.....	61	326	1,266	286	568	1,108	2,947	3,513	282
	Less than 0.10.....	3	7	7	7	14	7	73	85	13
	0.10 to 0.19.....	4								
	0.20 to 0.29.....	2	104	478	91	200	416	1,491	1,575	93
	0.30 to 0.39.....	12	67	220	57	103	186	520	617	88
	0.40 to 0.49.....	10								
	0.50 to 0.59.....	3	136	525	123	247	483	809	1,061	73
	0.60 to 0.69.....	7								
	0.70 to 0.79.....	1								
	1.00 and over.....	2	12	36	8	4	16	54	175	15
	Undistributed <sup>2</sup> .....	17								
	Dimension granite subindustry, total.....	66	824	3,601	773	1,645	3,271	6,513	9,428	385
	Less than 0.10.....	1	25	62	25	45	62	538	599	19
	0.10 to 0.19.....	5								
	0.20 to 0.29.....	5	46	152	46	93	152	638	741	18
	0.30 to 0.39.....	7	92	430	88	168	392	1,133	1,371	138
	0.40 to 0.49.....	9	115	459	102	202	409	1,051	1,325	45
	0.50 to 0.59.....	7								
	0.60 to 0.69.....	2	260	1,289	243	521	1,146	2,063	2,832	46
	0.70 to 0.79.....	2								
	0.80 to 0.89.....	9	131	575	126	291	543	657	1,321	78
	0.90 to 0.99.....	1								
	1.00 and over.....	11	146	601	135	308	536	426	1,182	36
	Undistributed <sup>2</sup> .....	7	9	33	8	17	31	7	57	5
	Dimension stone, n.e.c., sub-industry, total.....	192	1,006	2,977	911	1,607	2,607	5,382	6,794	447
	Less than 0.10.....	1	11	25	11	17	25	208	263	33
	0.10 to 0.19.....	8								
	0.20 to 0.29.....	8	27	108	23	39	91	429	640	33
	0.30 to 0.39.....	18	98	319	90	167	296	922	1,022	33
	0.40 to 0.49.....	27	212	539	192	334	496	1,089	1,285	103
	0.50 to 0.59.....	40	215	579	199	325	539	1,123	1,335	56
	0.60 to 0.69.....	12	152	436	146	264	406	696	860	79
	0.70 to 0.79.....	9	87	376	75	172	305	494	672	11
	0.80 to 0.89.....	8	40	121	39	76	120	146	187	30
	1.00 and over.....	19	104	282	96	154	245	187	296	38
	Undistributed <sup>2</sup> .....	42	60	192	40	59	84	88	234	31

See footnotes at end of table.



**TABLE 3. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963—Continued**

Code	Industry and ratio of payroll to value added in mining	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
			Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
Nonmetallic minerals mining—Continued										
1421	Crushed and broken stone:									
	Crushed and broken limestone sub-industry, total.....	1,612	31,095	160,588	26,331	59,365	126,791	408,450	542,886	59,535
	Less than 0.10.....	17	86	387	66	146	334	9,824	10,383	751
	0.10 to 0.19.....	100	1,559	6,954	1,352	2,972	5,965	41,744	47,532	5,663
	0.20 to 0.29.....	224	4,752	25,026	4,249	9,839	21,383	101,830	125,279	11,415
	0.30 to 0.39.....	411	8,509	39,589	7,436	17,616	33,566	116,804	146,227	16,245
	0.40 to 0.49.....	197	4,842	25,675	4,106	9,123	20,873	57,460	77,317	6,896
	0.50 to 0.59.....	157	3,923	21,778	3,389	7,348	17,486	39,972	55,705	7,024
	0.60 to 0.69.....	104	2,127	11,141	1,795	3,830	8,494	17,208	30,215	3,945
	0.70 to 0.79.....	70	1,536	7,761	1,354	2,933	6,234	10,452	16,854	1,355
	0.80 to 0.89.....	42	811	3,924	686	1,477	3,079	4,684	9,435	966
	0.90 to 0.99.....	16	289	1,645	241	498	1,057	1,722	2,529	1,116
	1.00 and over.....	110	1,632	8,514	1,422	3,121	7,250	4,588	14,889	2,683
	Undistributed <sup>2</sup> .....	164	1,029	8,194	235	462	1,070	2,162	6,521	1,476
	Crushed and broken granite sub-industry, total.....	150	4,060	19,826	3,449	7,894	16,010	61,702	89,749	7,185
	Less than 0.10.....	5	60	217	56	98	184	2,604	2,664	36
	0.10 to 0.19.....	21	433	1,937	358	767	1,467	12,517	18,530	536
	0.20 to 0.29.....	33	1,273	6,280	1,099	2,454	5,158	24,356	31,172	2,380
	0.30 to 0.39.....	24	675	3,041	615	1,467	2,562	8,445	12,379	1,348
	0.40 to 0.49.....	12	256	1,310	235	573	1,167	2,932	4,856	778
	0.50 to 0.59.....	11	766	4,084	636	1,555	3,453	7,859	14,285	1,645
	0.60 to 0.69.....	7	173	709	147	308	616	1,061	1,795	31
	0.70 to 0.79.....	5	84	455	79	179	414	620	1,016	90
	0.80 to 0.89.....	2	100	449	83	175	343	491	874	139
	0.90 to 0.99.....	2	12	163	138	315	638	609	1,642	165
	1.00 and over.....	12	77	554	3	3	8	188	536	37
	Undistributed <sup>2</sup> .....	16								
	Crushed and broken stone, n.e.c., subindustry, total.....	494	8,081	48,701	6,406	13,575	35,042	111,503	162,225	15,967
	Less than 0.10.....	15	38	147	33	61	119	2,840	4,039	494
	0.10 to 0.19.....	23	262	1,051	241	530	936	6,085	7,934	625
	0.20 to 0.29.....	67	1,560	8,791	1,315	2,981	6,264	35,583	47,759	6,003
	0.30 to 0.39.....	67	1,368	8,271	1,187	2,222	7,041	24,278	34,538	2,198
	0.40 to 0.49.....	84	1,881	10,985	1,650	3,641	9,245	24,689	34,899	3,602
	0.50 to 0.59.....	61	670	3,538	539	1,114	2,581	6,337	9,994	705
	0.60 to 0.69.....	23	337	2,059	263	589	1,624	3,194	5,002	297
	0.70 to 0.79.....	26	454	2,942	378	799	2,266	3,953	6,846	757
	0.80 to 0.89.....	16	198	1,049	177	369	955	1,240	2,295	130
	0.90 to 0.99.....	13	145	908	119	256	770	969	2,060	349
	1.00 and over.....	35	493	3,103	449	908	2,820	1,882	5,147	642
	Undistributed <sup>2</sup> .....	64	675	5,897	55	105	421	453	1,712	165
1441	Sand and gravel:									
	Construction sand and gravel sub-industry, total.....	4,419	36,394	190,924	30,024	64,014	154,546	459,288	607,539	68,954
	Less than 0.10.....	100	240	741	224	443	673	14,601	15,423	1,954
	0.10 to 0.19.....	266	1,622	8,205	1,413	3,157	7,508	51,273	60,905	5,818
	0.20 to 0.29.....	666	6,883	33,821	5,841	12,440	28,501	95,507	118,401	12,880
	0.30 to 0.39.....	714	7,426	37,636	6,345	13,354	31,943	106,461	132,008	14,302
	0.40 to 0.49.....	621	6,642	33,184	5,636	11,944	27,859	91,305	115,283	12,631
	0.50 to 0.59.....	389	3,732	20,245	3,145	6,721	16,704	37,571	52,837	5,859
	0.60 to 0.69.....	219	2,172	12,055	1,839	4,032	10,070	18,710	28,521	3,338
	0.70 to 0.79.....	138	1,568	9,263	1,269	2,862	7,518	20,525	28,521	2,304
	0.80 to 0.89.....	115	1,168	6,773	923	1,863	5,385	7,993	13,759	1,101
	0.90 to 0.99.....	60	973	5,859	760	1,656	4,474	6,248	9,516	1,339
	1.00 and over.....	352	2,681	14,409	1,974	4,206	10,118	8,440	20,532	4,299
	Undistributed <sup>2</sup> .....	779	1,287	8,733	655	1,336	3,793	8,814	19,829	3,129
	Glass sand subindustry, total.....	39	1,570	9,140	1,223	2,738	6,650	22,648	29,099	3,998
	0.10 to 0.19.....	4	71	427	64	153	380	2,487	3,092	395
	0.20 to 0.29.....	7	236	1,665	199	450	1,360	6,462	8,125	1,717
	0.30 to 0.39.....	7	432	2,605	363	834	1,959	6,960	8,553	696
	0.40 to 0.49.....	9	381	2,132	319	721	1,701	4,487	6,012	474
	0.50 to 0.59.....	3	90	364	88	187	356	641	894	133
	0.60 to 0.69.....	3	83	467	59	124	237	763	1,138	75
	0.70 to 0.79.....	2								
	0.80 to 0.89.....	1								
	0.90 to 0.99.....	2								
	1.00 and over.....	2	257	1,480	131	269	657	848	1,285	508
	Undistributed <sup>2</sup> .....	1								
	Molding sand subindustry, total.....	93	927	4,992	764	1,546	3,776	12,838	16,642	904
	Less than 0.10.....	3	10	29	8	15	22	402	431	3
	0.10 to 0.19.....	7	36	113	35	57	110	737	800	90
	0.20 to 0.29.....	13	214	1,129	193	383	993	4,436	5,262	221
	0.30 to 0.39.....	20	296	1,784	263	594	1,498	4,860	6,441	354
	0.40 to 0.49.....	10	80	357	75	139	342	785	1,013	60
	0.50 to 0.59.....	8	74	384	62	112	324	719	912	46
	0.60 to 0.69.....	5	53	249	46	106	213	391	945	82
	0.70 to 0.79.....	2								
	0.80 to 0.89.....	1								
	0.90 to 0.99.....	2	98	301	82	140	274	276	454	36
	1.00 and over.....	2								
	Undistributed <sup>2</sup> .....	7								

**TABLE 3. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963—Continued**

Code	Industry and ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
			Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
	Nonmetallic minerals mining—Continued									
	Sand and gravel—Continued									
	Industrial sand, n.e.c., sub-industry, total.....	65	1,251	7,104	1,031	2,322	5,361	18,953	24,788	1,868
	Less than 0.10.....	3	19	76	18	41	75	284	329	68
	0.10 to 0.19.....	3	63	271	57	133	230	1,569	1,827	176
	0.20 to 0.29.....	10	92	478	82	128	429	2,083	2,601	163
	0.30 to 0.39.....	12	584	3,829	474	1,126	2,825	10,390	12,893	700
	0.40 to 0.49.....	9	147	782	126	245	593	1,762	2,590	365
	0.50 to 0.59.....	8	156	710	138	285	588	1,353	1,926	120
	0.60 to 0.69.....	9	85	449	53	126	262	712	932	95
	0.70 to 0.79.....	2								
	0.80 to 0.89.....	3								
	0.90 to 0.99.....	3								
	1.00 and over.....	4								
	Undistributed <sup>2</sup> .....	2	105	509	83	238	359	800	1,690	181
145	Clay and related minerals:									
1452	Bentonite, total.....	44	811	4,127	644	1,508	3,141	11,435	18,105	1,356
	Less than 0.19.....	6	67	281	55	128	218	2,485	2,984	243
	0.20 to 0.29.....	5	227	1,004	198	524	886	4,494	5,902	297
	0.30 to 0.49.....	7	213	879	178	385	721	2,613	4,767	297
	0.50 and over.....	14	260	1,651	211	467	1,310	1,846	4,419	514
	Undistributed <sup>2</sup> .....	12	44	312	2	4	6	( <sup>3</sup> )	33	5
1453	Fire clay, total.....	155	979	4,608	861	1,640	3,795	12,640	17,105	2,159
	Less than 0.10.....	13	37	127	31	48	98	2,750	2,847	325
	0.10 to 0.19.....	10	64	275	64	135	275	1,861	2,707	605
	0.20 to 0.29.....	17	55	270	51	105	252	1,071	1,425	212
	0.30 to 0.39.....	16	128	646	110	215	465	1,922	2,349	196
	0.40 to 0.49.....	24	226	943	213	410	885	2,145	2,779	308
	0.50 to 0.59.....	19	164	712	139	257	533	1,317	2,124	220
	0.60 to 0.69.....	9	62	293	54	92	235	448	623	133
	0.70 to 0.79.....	3	38	214	29	55	149	272	411	1
	0.80 to 0.99.....	4	27	152	24	45	139	174	243	64
	1.00 and over.....	11	142	825	107	208	607	676	1,108	95
	Undistributed <sup>2</sup> .....	29	36	151	39	70	157	4	489	-
1454	Fuller's earth, total.....	15	758	3,067	653	1,363	2,423	9,071	12,954	1,173
	0.10 to 0.29.....	2								
	0.30 to 0.39.....	4	537	2,252	456	919	1,722	7,181	10,394	907
	0.40 to 0.49.....	2								
	0.50 to 0.79.....	2	221	815	197	444	701	1,860	2,521	265
	Undistributed <sup>2</sup> .....	4	-	-	-	-	-	30	39	1
1455	Kaolin and ball clay, total.....	48	3,346	17,718	2,916	6,123	14,500	49,841	66,077	5,237
	Less than 0.19.....	8	197	910	190	387	885	6,358	7,498	1,018
	0.20 to 0.29.....	9	528	2,617	432	857	1,966	11,564	15,980	1,099
	0.30 to 0.39.....	7	753	4,120	660	1,318	3,371	11,966	16,056	1,152
	0.40 to 0.49.....	6	789	4,243	654	1,448	3,195	9,844	13,289	606
	0.50 to 0.59.....	5	778	4,203	708	1,558	3,647	8,206	10,558	1,201
	0.60 to 0.79.....	6	183	1,068	174	325	992	1,470	1,997	67
	0.80 and over.....	3	78	383	63	148	295	422	655	79
	Undistributed <sup>2</sup> .....	4	40	174	35	82	149	11	44	15
1456	Feldspar, total.....	31	461	1,963	394	850	1,749	6,117	8,459	1,702
	Less than 0.30.....	5	144	560	125	280	544	3,235	3,795	1,114
	0.30 to 0.49.....	4	199	928	185	394	889	2,348	3,755	526
	0.50 to 0.69.....	6	70	309	48	100	179	357	508	32
	0.70 and over.....	7	41	139	30	64	111	164	382	30
	Undistributed <sup>2</sup> .....	9	7	27	6	12	26	13	19	-
1459	Clay and related minerals, n.e.c., total.....	130	1,961	10,688	1,679	3,577	8,507	24,481	38,944	2,992
	Less than 0.19.....	3	18	62	16	30	56	408	316	102
	0.20 to 0.29.....	14	302	1,517	254	559	1,173	5,943	7,650	309
	0.30 to 0.39.....	22	518	3,228	440	877	2,527	9,416	13,131	452
	0.40 to 0.49.....	10	213	959	179	344	752	2,139	3,233	372
	0.50 to 0.59.....	16	321	1,588	289	653	1,374	2,948	5,564	289
	0.60 to 0.69.....	11	255	1,430	216	506	1,097	2,239	4,205	213
	0.70 to 0.99.....	10	163	942	137	283	754	1,121	2,043	131
	1.00 and over.....	16	159	927	138	301	744	475	2,758	917
	Undistributed <sup>2</sup> .....	28	12	35	10	24	30	( <sup>3</sup> )	44	207
147	Chemical and fertilizer minerals mining <sup>3</sup> :									
1472	Barite, total.....	54	1,434	6,799	911	1,887	3,605	11,107	16,668	1,101
	Less than 0.20.....	6	24	64	21	40	56	394	391	85
	0.20 to 0.29.....	7	160	603	140	297	556	2,247	3,141	173
	0.30 to 0.39.....	8	408	1,906	352	793	1,583	5,691	7,723	440
	0.40 to 0.49.....	3								
	0.50 to 0.59.....	3	139	564	119	269	458	1,236	2,610	84
	0.60 to 0.69.....	3								
	0.70 to 0.79.....	2	234	748	201	339	707	1,143	2,024	107
	1.00 and over.....	8	82	315	75	142	237	149	338	131
	Undistributed <sup>2</sup> .....	14	387	2,599	3	7	8	247	441	81

See footnotes at end of table.

**TABLE 3. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963—Continued.**

Code	Industry and ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
			Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
	Nonmetallic minerals mining—Continued									
	Chemical and fertilizer minerals mining <sup>2</sup> —Continued									
1473	Fluorspar, total.....	30	804	3,981	682	1,346	3,037	8,869	15,792	313
	0.10 to 0.19.....	2								
	0.20 to 0.29.....	2	78	370	61	125	264	1,884	3,791	11
	0.30 to 0.39.....	3								
	0.40 to 0.49.....	10	539	2,656	460	920	2,050	5,924	10,257	83
	0.50 to 0.59.....	3								
	0.60 to 0.69.....	1								
	0.70 to 0.79.....	1	187	955	161	301	723	1,061	1,744	219
	0.80 to 0.89.....	1								
	1.00 and over.....	3								
	Undistributed <sup>2</sup> .....	4								
1474	Potash, soda, and borate minerals, total.....	23	7,050	51,859	4,822	9,849	32,901	156,151	192,116	26,773
	0.10 to 0.19.....	3								
	0.20 to 0.29.....	3	2,302	16,432	1,774	3,539	12,137	80,729	93,344	9,815
	0.30 to 0.39.....	4	2,844	20,065	2,188	4,545	14,714	58,931	74,621	4,718
	0.40 to 0.49.....	2								
	0.50 to 0.59.....	2	1,904	15,362	860	1,765	6,050	16,491	24,151	12,240
	1.00 and over.....	2								
	Undistributed <sup>2</sup> .....	4								
1475	Phosphate rock, total.....	66	5,624	31,955	3,996	9,047	20,642	94,889	161,658	22,234
	Less than 0.20.....	13	993	4,161	765	1,761	3,162	32,250	66,440	3,828
	0.20 to 0.29.....	17	1,611	9,341	1,371	3,129	7,595	37,537	57,689	11,528
	0.30 to 0.39.....	5								
	0.40 to 0.49.....	2	745	4,466	601	1,442	3,143	12,873	18,110	975
	0.50 to 0.59.....	6	549	2,991	460	956	2,388	5,555	8,418	597
	0.60 to 0.69.....	6	311	1,712	270	522	1,401	2,654	3,796	445
	0.70 to 0.79.....	4	415	2,517	377	870	2,235	3,192	4,596	4,261
	0.80 to 0.89.....	5								
	0.90 to 0.99.....	1								
	1.00 and over.....	3	1,000	6,767	152	367	718	828	2,609	600
	Undistributed <sup>2</sup> .....	4								
1476	Rock salt, total.....	25	2,443	15,955	1,812	4,260	11,142	49,539	59,297	7,401
	0.10 to 0.19.....	4								
	0.20 to 0.29.....	5	1,199	7,362	1,045	2,430	6,160	34,855	41,336	5,072
	0.30 to 0.39.....	4	395	2,916	329	765	2,247	8,023	9,672	429
	0.40 to 0.49.....	1								
	0.50 to 0.59.....	4	521	3,495	431	1,048	2,718	6,594	8,189	1,895
	0.60 and over.....	3	7	17	6	15	16	24	34	-
	Undistributed <sup>2</sup> .....	4	321	2,165	1	2	1	43	66	5
1481	Nonmetallic minerals services, total.....	119	871	4,581	806	1,575	4,209	9,326	13,246	1,434
	Less than 0.10.....	4	6	21	6	12	21	269	283	61
	0.10 to 0.19.....	12	31	97	30	51	94	666	700	105
	0.20 to 0.29.....	11	44	161	40	89	151	623	829	121
	0.30 to 0.39.....	25	110	254	106	194	250	728	938	257
	0.40 to 0.49.....	15	199	1,238	185	370	1,107	2,732	3,976	258
	0.50 to 0.59.....	17	94	552	87	189	436	1,005	1,681	183
	0.60 to 0.69.....	11	205	1,446	192	370	1,407	2,334	3,407	337
	0.70 to 0.79.....	5	41	147	40	64	130	199	248	-
	0.80 to 0.89.....	8								
	0.90 to 0.99.....	1	133	641	113	224	591	742	1,089	36
	1.00 and over.....	3	7	21	6	10	19	10	73	72
	Undistributed <sup>2</sup> .....	7	1	3	1	2	3	18	22	4
1492	Gypsum, total.....	37	458	2,406	383	807	1,913	7,753	10,160	1,279
	Less than 0.20.....	5	65	400	60	129	367	2,428	2,858	223
	0.20 to 0.29.....	7	143	714	115	230	511	2,844	2,922	600
	0.30 to 0.39.....	6	78	417	67	145	352	1,214	1,422	190
	0.40 to 0.59.....	4	52	366	44	97	309	715	1,165	99
	0.60 to 0.69.....	4	24	127	16	33	70	201	324	26
	0.70 and over.....	5	87	337	78	169	300	292	1,119	123
	Undistributed <sup>2</sup> .....	6	9	45	3	4	4	59	350	18
1493	Mica, total.....	34	398	1,582	357	733	1,299	3,925	5,560	860
	Less than 0.30.....	8	23	74	17	32	62	294	301	72
	0.30 to 0.39.....	7	141	596	123	282	450	1,783	2,178	415
	0.40 to 0.49.....	7	109	380	106	182	341	895	1,553	166
	0.50 and over.....	7	105	448	92	197	366	617	1,128	178
	Undistributed <sup>2</sup> .....	5	20	84	19	40	80	336	400	29
1494	Native asphalt and bitumens, total....	13	422	2,241	357	728	1,723	6,333	8,509	1,081
	0.10 to 0.49.....	6	346	1,696	291	596	1,324	5,821	7,965	1,006
	0.50 to 0.59.....	3	14	60	14	27	60	105	118	2
	0.60 and over.....	4	62	485	52	105	339	407	426	73

See footnotes at end of table.

**TABLE 3. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963—Continued**

Code	Industry and ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
			Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
	Nonmetallic minerals mining—Continued									
1495	Pumice and pumicite, total.....	85	247	1,056	222	428	981	4,198	5,358	682
	Less than 0.10.....	6	10	38	10	19	38	959	1,048	18
	0.10 to 0.19.....	4	9	24	9	15	24	197	223	30
	0.20 to 0.29.....	12	80	339	72	138	307	1,396	1,635	296
	0.30 to 0.39.....	15	59	267	50	102	243	768	1,028	103
	0.40 to 0.49.....	8	45	200	41	80	193	456	711	126
	0.50 to 0.59.....	6	11	21	11	19	21	40	56	2
	0.60 to 0.99.....	4	15	101	13	29	94	122	172	7
	1.00 and over.....	5	9	34	9	14	34	30	40	40
	Undistributed <sup>2</sup> .....	25	9	32	7	12	27	230	445	60
1496	Talc, soapstone, and pyrophyllite, total.....	65	1,276	6,627	1,054	2,229	5,390	13,746	17,534	1,148
	Less than 0.19.....	5	28	153	20	39	92	918	1,238	52
	0.20 to 0.29.....	5	152	1,100	137	322	993	3,719	4,466	196
	0.30 to 0.39.....	15	133	661	112	227	514	1,930	2,223	243
	0.40 to 0.49.....	5	53	278	51	105	263	649	817	104
	0.50 to 0.59.....	7	530	1,926	467	954	1,745	3,580	4,645	139
	0.60 to 0.69.....	4	57	259	44	87	179	383	649	12
	0.70 to 0.79.....	5	231	1,526	167	389	1,301	2,025	2,582	183
	0.80 to 0.99.....	3	44	240	40	73	222	282	684	42
	1.00 and over.....	4	19	89	16	33	81	45	50	92
	Undistributed <sup>2</sup> .....	12	29	395	-	-	-	215	180	85
1497	Natural abrasives, except sand, total.....	23	294	1,583	216	466	1,048	4,125	5,002	498
	Less than 0.30.....	9	83	396	71	149	313	2,116	2,537	55
	0.30 to 0.49.....	5	163	838	128	264	621	1,998	2,335	396
	0.70 to 0.79.....	1	4	349	17	53	114	11	130	47
	1.00 and over.....	1	48	349	17	53	114	11	130	47
	Undistributed <sup>2</sup> .....	7	48	349	17	53	114	11	130	47
1498	Peat, total.....	109	504	1,778	442	948	1,473	5,626	7,360	870
	Less than 0.10.....	3	309	974	288	621	890	4,448	5,776	436
	0.10 to 0.19.....	10	309	974	288	621	890	4,448	5,776	436
	0.20 to 0.29.....	10	309	974	288	621	890	4,448	5,776	436
	0.30 to 0.39.....	23	17	35	17	39	35	83	103	47
	0.40 to 0.49.....	7	23	80	17	33	64	152	174	26
	0.50 to 0.59.....	6	37	167	20	47	106	255	332	136
	0.60 to 0.69.....	5	31	101	23	41	76	138	152	48
	0.70 to 0.79.....	4	23	88	21	45	81	103	144	18
	0.80 to 0.99.....	4	55	278	49	107	178	236	429	74
	1.00 and over.....	5	9	55	7	15	43	211	250	85
	Undistributed <sup>2</sup> .....	32	9	55	7	15	43	211	250	85
1499	Nonmetallic minerals, n.e.c., total.....	87	1,878	11,201	1,578	3,326	8,961	32,623	42,963	5,511
	0.10 to 0.19.....	6	55	241	51	107	210	1,454	1,638	96
	0.20 to 0.29.....	24	720	4,685	567	1,182	3,508	20,358	23,533	2,585
	0.30 to 0.39.....	14	395	2,170	341	725	1,760	6,403	7,984	788
	0.40 to 0.49.....	2	229	1,331	211	462	1,183	2,575	3,517	547
	0.50 to 0.59.....	5	238	1,525	209	450	1,291	1,857	4,376	1,019
	0.60 to 0.69.....	1	238	1,525	209	450	1,291	1,857	4,376	1,019
	0.70 to 0.79.....	2	238	1,525	209	450	1,291	1,857	4,376	1,019
	0.80 to 0.89.....	3	238	1,525	209	450	1,291	1,857	4,376	1,019
	0.90 to 0.99.....	2	75	354	62	133	239	231	953	85
	1.00 and over.....	10	75	354	62	133	239	231	953	85
	Undistributed <sup>2</sup> .....	18	166	895	137	267	770	(3)	962	391

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. n.e.c. Not elsewhere classified.

<sup>1</sup>In computing these ratios contract or subcontract employment serving the establishment is excluded. The cost of contract or subcontract work expressed as a percent of payroll for 1963 was: for metal mining, 21 percent; for anthracite mining, 38 percent; for bituminous coal and lignite mining, 9 percent; for oil and gas extraction, 93 percent; and for nonmetallic minerals mining, 12 percent.

<sup>2</sup>Represents establishments with zero or negative value added; establishments with no employees; and for number of employees and payroll, includes figures for separately reported central offices and related facilities.

<sup>3</sup>Not shown since cost of supplies, fuels, purchased electric energy, contract work, and purchased machinery installed exceeds value of shipments and receipts plus capital expenditures.

<sup>4</sup>Figures for ratio class 0.80 to 0.89 are included with those for ratio class 1.00 and over.

<sup>5</sup>Distributions for two industries are withheld to avoid disclosing figures for individual companies. The following table shows the number of establishments by ratio of payroll to value added in mining for these industries:

Ratio of payroll to value added in mining	1477	1479
United States, total.....	17	20
Less than 0.10.....	2	1
0.10 to 0.19.....	4	1
0.20 to 0.29.....	3	1

**TABLE 4. Employment at Central Administrative Offices and Related Facilities by Industry Groups and Industries: 1963 and 1958**

Code	Industry group and industry	1963		1958		Code	Industry group and industry	1963		1958	
		Employees (number)	Payroll (\$1,000)	Employees (number)	Payroll (\$1,000)			Employees (number)	Payroll (\$1,000)	Employees (number)	Payroll (\$1,000)
	All mineral industries.....	46,255	416,180	42,070	307,929	13	Oil and gas extraction—Continued				
10	Metal mining.....	4,791	47,777	6,221	41,404	138	Oil and gas field services:				
1011	Iron ores.....	2,114	23,349	3,712	25,456	1381	Drilling oil and gas wells....	414	3,627	162	1,390
1021	Copper ores.....	1,967	17,950	1,601	9,628	1382	Oil and gas exploration				
1031	Lead and zinc ores.....	296	2,478	412	3,126		services.....	175	1,641	125	776
109	Miscellaneous metal ores.....	173	1,637	169	1,131	14	Nonmetallic minerals mining.....	5,885	50,012	4,440	34,954
1094	Uranium-radium-vanadium ores..	143	1,287	158	1,009	1411	Dimension stone.....	39	297	29	318
11	Anthracite mining.....	498	2,226	609	3,538	1421	Crushed and broken stone.....	1,410	12,752	1,065	8,520
1111	Anthracite.....	498	2,226	(NA)	(NA)		Crushed and broken limestone				
12	Bituminous coal and lignite						subindustry.....	745	6,874	781	6,378
	mining.....	3,985	31,804	5,755	40,151	1441	Sand and gravel.....	1,071	8,821	695	5,203
1211	Bituminous coal.....	3,985	31,804	(NA)	(NA)	145	Clay and related minerals.....	188	1,509	(NA)	(NA)
13	Oil and gas extraction.....	31,096	284,361	25,045	187,882	147	Chemical and fertilizer				
1311	Crude petroleum and natural						minerals.....	3,043	25,281	2,257	18,251
	gas.....	28,973	266,814	23,044	174,274	149	Miscellaneous minerals, n.e.c..	134	1,352	131	838
	Crude petroleum.....	26,620	248,770	22,590	171,084	1496	Talc, soapstone, and				
	Natural gas.....	2,353	18,044	454	3,190		pyrophyllite.....	29	395	(NA)	(NA)

Note: Figures in this table represent central administrative offices at different locations from the establishments managed or served, or at the same location as one of these establishments, but not operated as an integral part of it. All figures in this table have been included in the reports for the industries with which they are associated.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.

**TABLE 5. Employment at Central Administrative Offices and Related Facilities by Divisions and Selected States: 1963 and 1958**

Division and States	1963		1958		Division and States	1963		1958	
	Employees (number)	Payroll (\$1,000)	Employees (number)	Payroll (\$1,000)		Employees (number)	Payroll (\$1,000)	Employees (number)	Payroll (\$1,000)
United States, total.....	46,255	416,180	42,070	307,929	South Atlantic—Continued				
New England.....	245	2,465	339	2,631	North Carolina.....	109	841	94	445
Middle Atlantic.....	4,712	41,335	4,869	33,980	Georgia.....	49	436	(D)	(D)
New York.....	2,149	21,183	2,029	14,542	Florida.....	217	1,637	76	426
New Jersey.....	317	2,576	375	2,431	East South Central.....	364	2,723	249	1,995
Pennsylvania.....	2,171	17,576	2,465	17,007	Kentucky.....	140	881	93	510
East North Central.....	3,713	34,462	4,543	36,693	Tennessee.....	64	(D)	41	242
Ohio.....	1,420	14,988	2,474	21,224	West South Central.....	26,746	242,814	20,688	150,057
Indiana.....	464	4,145	(D)	(D)	Oklahoma.....	6,427	57,242	5,100	36,613
Illinois.....	1,365	10,932	1,135	9,714	Texas.....	17,728	160,396	12,566	92,162
West North Central.....	2,868	24,167	4,441	29,574	Mountain.....	2,853	25,104	2,368	17,608
Minnesota.....	1,370	14,334	3,156	21,355	Montana.....	418	(D)	317	2,002
Iowa.....	(D)	(D)	95	817	Wyoming.....	384	3,483	370	2,800
Missouri.....	862	4,659	928	5,645	Colorado.....	982	9,262	912	6,444
Kansas.....	(D)	(D)	224	(D)	New Mexico.....	379	(D)	(D)	(D)
South Atlantic.....	1,589	12,578	2,270	12,872	Utah.....	345	2,913	339	2,370
Maryland.....	(D)	(D)	(D)	(D)	Pacific.....	3,165	30,532	2,303	22,519
Virginia.....	336	2,128	462	2,905	Washington.....	30	276	(D)	(D)
West Virginia.....	776	6,464	1,592	8,667	California.....	3,123	30,114	2,220	21,718

Note: Figures in this table represent central administrative offices at different locations from the establishments managed or served, or at the same location as one of these establishments but not operated as an integral part of it. All figures in this table have been included in the reports for the States where they are located.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

# Type of Operation

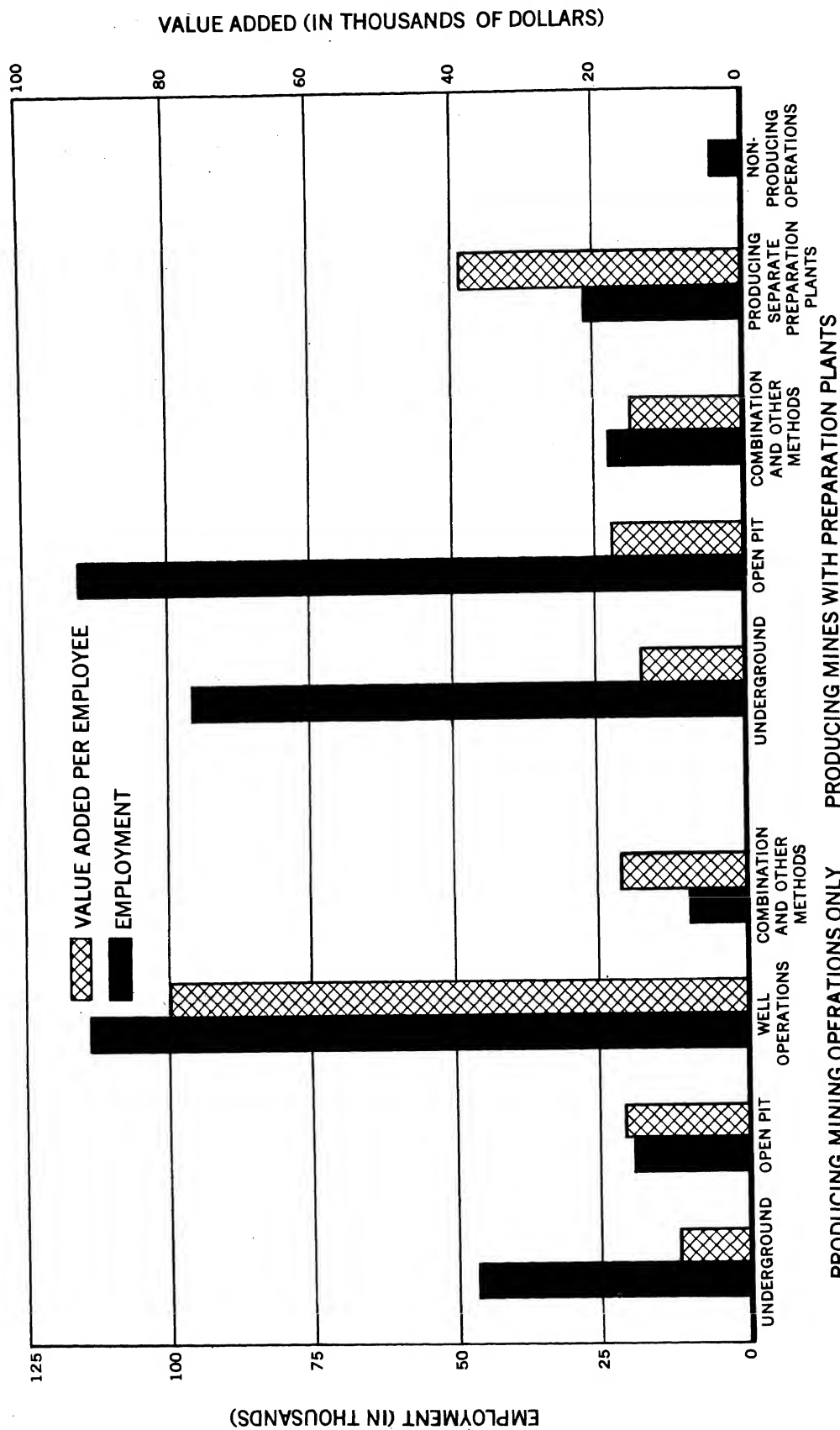
## Chapter 5

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# EMPLOYMENT AND VALUE ADDED PER EMPLOYEE IN THE MINERAL INDUSTRIES IN THE UNITED STATES: 1963



BUREAU OF THE CENSUS

U.S. DEPARTMENT OF COMMERCE

**TABLE 1. Selected Statistics for Industries, Except Service Industries, for Major Industry Groups, 1963 and 1958; and for Industries, 1963**

Industry code, industry group or industry and item	All types of establishments, total	Producing establishments									Nonproducing establishments	
		Total	Mines only				Mines with preparation plants					Separately operated preparation plants
			Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
ALL MINERAL INDUSTRIES												
1963												
Establishments.....number..	32,063	30,079	20,910	5,152	2,400	13,358	8,109	971	6,495	643	1,060	1,984
Employees.....do....	497,724	492,909	218,026	45,822	19,757	152,447	236,863	96,915	116,749	23,199	26,460	4,815
Value added in mining.....\$1,000..	14,607,806	14,644,036	9,948,322	417,095	326,178	9,205,049	3,684,776	1,309,181	2,031,184	344,411	1,014,387	( <sup>2</sup> )
1958												
Establishments.....number..	30,053	28,508	20,121	5,487	2,716	11,918	7,358	1,274	5,257	827	1,029	1,545
Employees.....do....	3609,745	3605,121	4278,848	564,972	322,750	5191,183	5291,755	5141,776	119,547	531,053	33,626	4,624
Value added in mining.....\$1,000..	512,220,193	512,239,655	48,387,251	5480,491	3347,583	57,559,804	53,053,318	51,260,249	1,503,086	5297,852	789,460	( <sup>2</sup> )
10 METAL MINING												
1963												
Establishments.....number..	1,531	1,035	578	406	160	12	392	108	274	10	65	496
Employees.....do....	75,004	173,013	18,115	8,036	6,751	3,328	43,488	23,406	19,214	868	6,777	1,991
Value added in mining.....\$1,000..	1,393,481	1,396,300	323,353	136,185	156,554	30,614	916,691	338,347	560,438	17,906	159,526	( <sup>2</sup> )
1958												
Establishments.....number..	2,256	1,614	1,021	632	364	25	520	226	273	21	73	642
Employees.....do....	689,398	(D)	627,467	16,510	67,974	2,983	49,539	24,471	22,746	2,322	(D)	(D)
Value added in mining.....\$1,000..	61,157,354	(D)	6386,144	193,237	6164,480	28,427	641,382	221,317	372,240	47,825	(D)	(D)
1963												
1011 Iron Ores												
Establishments.....number..	208	180	67	22	45	-	102	12	90	-	11	28
Employees.....do....	123,083	20,123	4,589	2,602	1,987	-	13,849	4,043	9,806	-	1,685	846
Value added in mining.....\$1,000..	549,305	554,943	101,812	47,155	54,657	-	382,530	57,123	325,407	-	70,601	( <sup>2</sup> )
1021 Copper Ores												
Establishments.....number..	160	90	49	25	22	2	33	15	18	-	8	70
Employees.....do....	126,486	24,308	8,710	1,831	(D)	(D)	12,502	5,103	7,399	-	3,096	211
Value added in mining.....\$1,000..	417,089	417,023	124,063	19,923	(D)	(D)	239,783	55,158	184,625	-	53,177	66
1031 Lead and Zinc Ores												
Establishments.....number..	205	147	96	84	11	1	42	40	1	1	9	58
Employees.....do....	19,422	8,948	(D)	1,614	(D)	(D)	(D)	6,264	(D)	(D)	642	178
Value added in mining.....\$1,000..	84,373	84,618	(D)	12,818	(D)	(D)	(D)	62,589	(D)	(D)	6,092	( <sup>2</sup> )
Lead ores subindustry												
Establishments.....number..	125	82	67	56	11	-	14	14	-	-	1	43
Employees.....do....	4,320	3,969	(D)	806	(D)	-	3,056	3,056	-	-	(D)	121
Value added in mining.....\$1,000..	34,046	34,303	(D)	6,639	(D)	-	26,129	26,129	-	-	(D)	( <sup>2</sup> )
Zinc ores subindustry												
Establishments.....number..	80	65	29	28	-	1	28	26	1	1	8	15
Employees.....do....	15,102	4,979	(D)	807	-	(D)	(D)	3,208	(D)	(D)	(D)	57
Value added in mining.....\$1,000..	50,327	50,315	(D)	6,179	-	(D)	(D)	36,460	(D)	(D)	(D)	12
104 Gold and Silver Ores												
Establishments.....number..	466	237	87	60	24	3	149	26	120	3	1	229
Employees.....do....	4,216	3,825	(D)	(D)	150	(D)	3,470	(D)	340	(D)	(D)	391
Value added in mining.....\$1,000..	49,026	48,331	(D)	(D)	1,355	(D)	46,212	(D)	5,852	(D)	(D)	695

See footnotes at end of table.



TABLE 1. Selected Statistics for Industries, Except Service Industries, for Major Industry Groups, 1963 and 1958; and for Industries, 1963—Continued

Industry code, industry group or industry and item	All types of establishments, total	Producing establishments									Non-producing establishments	
		Total	Mines only				Mines with preparation plants					Separately operated preparation plants
			Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
1042 Lode Gold												
Establishments....number..	201	70	41	34	5	2	28	17	8	3	1	131
Employees.....do....	2,397	2,180	192	(D)	141	(D)	(D)	(D)	(D)	(D)	(D)	217
Value added in mining.....\$1,000..	21,312	20,952	1,282	(D)	1,048	(D)	(D)	(D)	(D)	(D)	(D)	360
1043 Placer Gold												
Establishments....number..	158	110	-	-	-	-	110	-	110	-	-	48
Employees.....do....	361	331	-	-	-	-	331	-	331	-	-	30
Value added in mining.....\$1,000..	5,810	5,792	-	-	-	-	5,792	-	5,792	-	-	18
1044 Silver Ores												
Establishments....number..	107	57	46	26	19	1	11	9	2	-	-	50
Employees.....do....	1,458	1,314	(D)	53	9	(D)	(D)	1,252	(D)	-	-	144
Value added in mining.....\$1,000..	21,904	21,587	(D)	494	307	(D)	(D)	20,777	(D)	-	-	317
1051 Bauxite												
Establishments....number..	17	16	9	1	7	1	1	-	1	-	6	1
Employees.....do....	552	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)	-	(D)	(D)
Value added in mining.....\$1,000..	17,464	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)	-	(D)	(D)
106 Ferroalloy Ores												
Establishments....number..	58	19	5	1	4	-	7	5	2	-	7	39
Employees.....do....	13,102	2,873	111	(D)	(D)	-	2,527	(D)	(D)	-	235	193
Value added in mining.....\$1,000..	66,407	66,257	1,840	(D)	(D)	-	58,895	(D)	(D)	-	5,522	150
1062 Manganese Ores												
Establishments....number..	17	8	2	-	2	-	1	1	-	-	5	9
Employees.....do....	224	175	(D)	-	(D)	-	(D)	(D)	-	-	(D)	49
Value added in mining.....\$1,000..	2,348	2,413	(D)	-	(D)	-	(D)	(D)	-	-	(D)	( <sup>2</sup> )
1064 Tungsten Ores and 1069 Ferroalloy ores, n.e.c.												
Establishments....number..	41	11	3	1	2	-	6	4	2	-	2	30
Employees.....do....	12,878	2,698	(D)	(D)	(D)	-	(D)	(D)	(D)	-	(D)	144
Value added in mining.....\$1,000..	64,059	63,844	(D)	(D)	(D)	-	(D)	(D)	(D)	-	(D)	215
109 Miscellaneous Metal Ores												
Establishments....number..	417	346	265	213	47	5	58	10	42	6	23	71
Employees.....do....	8,730	(D)	(D)	1,880	121	(D)	4,766	2,292	1,658	816	1,021	(D)
Value added in mining.....\$1,000..	209,817	(D)	(D)	55,497	5,660	(D)	126,513	64,250	44,462	17,801	22,850	(D)
1092 Mercury Ores												
Establishments....number..	49	32	3	-	3	-	29	3	23	3	-	17
Employees.....do....	316	(D)	(D)	-	(D)	-	(D)	75	44	(D)	-	(D)
Value added in mining.....\$1,000..	2,569	(D)	(D)	-	(D)	-	(D)	517	613	(D)	-	(D)
1093 Titanium Ores												
Establishments....number..	8	8	-	-	-	-	8	-	8	-	-	-
Employees.....do....	997	997	-	-	-	-	997	-	997	-	-	-
Value added in mining.....\$1,000..	15,021	15,021	-	-	-	-	15,021	-	15,021	-	-	-
1094 Uranium-Radium-Vanadium Ores												
Establishments....number..	335	297	261	213	43	5	19	7	9	3	17	38
Employees.....do....	16,665	6,453	2,007	1,880	(D)	(D)	3,457	2,217	(D)	(D)	989	69
Value added in mining.....\$1,000..	190,629	190,600	61,348	55,497	(D)	(D)	106,750	62,501	(D)	(D)	22,502	29
1099 Metallic Ores, n.e.c.												
Establishments....number..	25	9	1	-	1	-	2	-	2	-	6	16
Employees.....do....	1165	73	(D)	-	(D)	-	(D)	-	(D)	-	32	78
Value added in mining.....\$1,000..	1,598	1,309	(D)	-	(D)	-	(D)	-	(D)	-	348	289

See footnotes at end of table.

TABLE 1. Selected Statistics for Industries, Except Service Industries, for Major Industry Groups, 1963 and 1958; and for Industries, 1963—Continued

Industry code, industry group or industry and item	All types of establishments, total	Producing establishments									Nonproducing establishments	
		Total	Mines only				Mines with preparation plants					Separately operated preparation plants
			Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
11 ANTHRACITE MINING (ANTHRACITE)												
1963												
Establishments.....number..	1,026	1,021	869	748	82	39	73	10	14	49	79	5
Employees.....do.....	10,692	10,682	4,093	2,509	938	646	4,901	672	738	3,491	1,190	10
Value added in mining.....\$1,000..	110,527	110,545	42,930	23,048	12,526	7,356	53,137	3,674	9,574	39,889	14,478	( <sup>2</sup> )
1958												
Establishments.....number..	1,163	1,154	966	829	77	60	91	17	11	63	97	9
Employees.....do.....	19,712	19,703	7,301	5,505	954	842	10,019	573	752	8,694	2,383	9
Value added in mining.....\$1,000..	142,198	142,348	60,696	33,962	18,320	8,414	63,758	3,196	4,786	55,776	17,894	( <sup>2</sup> )
12 BITUMINOUS COAL AND LIGNITE MINING												
1963												
Establishments.....number..	6,174	6,135	4,727	3,947	592	188	1,233	731	365	137	175	39
Employees.....do.....	132,558	132,409	42,975	34,565	5,249	3,161	82,778	62,021	11,825	8,932	2,671	149
Value added in mining.....\$1,000..	1,589,908	1,589,260	377,536	250,136	84,141	43,259	1,170,328	776,056	257,202	137,070	41,396	648
1958												
Establishments.....number..	6,783	6,737	4,901	3,939	763	199	1,626	984	470	172	210	46
Employees.....do.....	186,443	186,220	50,625	42,084	5,717	2,804	132,351	106,195	15,105	10,814	3,244	223
Value added in mining.....\$1,000..	1,600,630	1,600,070	352,890	247,180	72,163	33,125	1,213,781	897,350	212,325	98,748	33,399	560
1963												
1211 Bituminous Coal												
Establishments.....number..	6,115	6,078	4,696	3,938	570	188	1,208	730	341	137	174	37
Employees.....do.....	132,046	132,409	42,912	34,560	5,191	3,161	82,778	62,021	11,381	8,932	2,671	149
Value added in mining.....\$1,000..	1,578,078	1,589,260	376,740	250,107	83,374	43,259	1,170,328	776,056	246,207	137,070	41,396	648
1212 Lignite												
Establishments.....number..	59	57	-	9	22	-	25	1	24	-	1	2
Employees.....do.....	512	( <sup>7</sup> )	63	5	58	-	( <sup>7</sup> )	( <sup>7</sup> )	444	-	( <sup>7</sup> )	( <sup>7</sup> )
Value added in mining.....\$1,000..	11,830	( <sup>7</sup> )	796	29	767	-	( <sup>7</sup> )	( <sup>7</sup> )	10,995	-	( <sup>7</sup> )	( <sup>7</sup> )
13 OIL AND GAS EXTRACTION												
1963												
Establishments.....number..	15,030	13,727	13,082	-	-	13,082	-	-	-	-	645	1,303
Employees.....do.....	159,103	157,034	143,183	-	-	143,183	-	-	-	-	13,851	2,069
Value added in mining.....\$1,000..	9,778,442	9,812,388	9,049,771	-	-	9,049,771	-	-	-	-	762,617	( <sup>2</sup> )
1958												
Establishments.....number..	12,603	11,867	11,278	-	-	11,278	-	-	-	-	589	736
Employees.....do.....	196,670	(D)	(D)	-	-	(D)	-	-	-	-	(D)	(D)
Value added in mining.....\$1,000..	57,927,502	(D)	(D)	-	-	(D)	-	-	-	-	(D)	(D)
1963												
1311 Crude Petroleum and Natural Gas												
Establishments.....number..	14,378	13,082	13,082	-	-	13,082	-	-	-	-	-	1,296
Employees.....do.....	145,244	143,183	143,183	-	-	143,183	-	-	-	-	-	2,061
Value added in mining.....\$1,000..	9,016,372	9,049,771	9,049,771	-	-	9,049,771	-	-	-	-	-	( <sup>2</sup> )

See footnotes at end of table.

TABLE 1. Selected Statistics for Industries, Except Service Industries, for Major Industry Groups, 1963 and 1958; and for Industries, 1963—Continued

Industry code, industry group or industry and item	All types of establishments, total	Producing establishments									Nonproducing establishments	
		Total	Mines only				Mines with preparation plants					Separately operated preparation plants
			Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
1321 Natural Gas Liquids Establishments.....number..	652	645	-	-	-	-	-	-	-	-	645	7
Employees.....do....	13,859	13,851	-	-	-	-	-	-	-	-	13,851	8
Value added in mining.....\$1,000..	762,070	762,617	-	-	-	-	-	-	-	-	762,617	(2)
14 NONMETALLIC MINERALS MINING												
1963												
Establishments.....number..	8,302	8,161	1,654	51	1,566	37	6,411	122	5,842	447	96	141
Employees.....do....	120,367	119,771	9,660	712	6,819	2,129	105,696	10,816	84,972	9,908	1,971	596
Value added in mining.....\$1,000..	1,735,448	1,735,543	154,732	7,726	72,957	74,049	1,544,620	191,104	1,203,970	149,546	36,370	(2)
1958												
Establishments.....number..	7,248	7,136	1,955	85	1,514	356	5,121	133	4,417	571	60	112
Employees.....do....	8117,522	8117,185	415,279	859	48,081	6,339	4100,593	11,047	480,323	9,223	1,258	337
Value added in mining.....\$1,000..	81,385,305	81,383,346	4221,389	6,029	492,326	123,034	4144,963	143,594	4905,866	95,503	16,606	1,959
1963												
141 Dimension Stone Establishments.....number..	319	310	298	3	295	-	12	-	12	-	-	9
Employees.....do....	2,156	2,142	1,928	19	1,909	-	214	-	214	-	-	14
Value added in mining.....\$1,000..	14,842	14,847	13,640	137	13,503	-	1,207	-	1,207	-	-	(2)
1412 Dimension Limestone Establishments.....number..	61	61	58	-	58	-	3	-	3	-	-	-
Employees.....do....	326	326	314	-	314	-	12	-	12	-	-	-
Value added in mining.....\$1,000..	2,947	2,947	2,867	-	2,867	-	80	-	80	-	-	-
1413 Dimension Granite Establishments.....number..	66	66	65	1	64	-	1	-	1	-	-	-
Employees.....do....	824	824	(D)	(D)	700	-	(D)	-	(D)	-	-	-
Value added in mining.....\$1,000..	6,513	6,513	(D)	(D)	5,732	-	(D)	-	(D)	-	-	-
1419 Dimension Stone, n.e.c. Establishments.....number..	192	183	175	2	173	-	8	-	8	-	-	9
Employees.....do....	1,006	992	(D)	(D)	895	-	(D)	-	(D)	-	-	14
Value added in mining.....\$1,000..	5,382	5,387	(D)	(D)	4,904	-	(D)	-	(D)	-	-	(2)
142 Crushed and Broken Stone Establishments.....number..	2,256	2,224	127	1	126	-	2,051	64	1,970	17	46	32
Employees.....do....	43,236	43,069	981	(D)	(D)	-	39,864	(D)	36,928	(D)	885	167
Value added in mining.....\$1,000..	581,655	582,008	14,759	(D)	(D)	-	554,879	(D)	521,033	(D)	12,370	(2)
1422 Crushed and Broken Limestone Establishments.....number..	1,612	1,586	57	-	57	-	1,504	56	1,433	15	25	26
Employees.....do....	31,095	30,988	486	-	486	-	29,166	1,755	26,674	737	591	107
Value added in mining.....\$1,000..	408,450	408,642	7,837	-	7,837	-	392,459	20,292	364,976	7,191	8,346	(2)
1423 Crushed and Broken Granite Establishments.....number..	150	150	10	1	9	-	140	2	138	-	-	-
Employees.....do....	4,060	4,060	121	(D)	(D)	-	3,939	(D)	(D)	-	-	-
Value added in mining.....\$1,000..	61,702	61,702	2,347	(D)	(D)	-	59,355	(D)	(D)	-	-	-

See footnotes at end of table.

**TABLE 1. Selected Statistics for Industries, Except Service Industries, for Major Industry Groups, 1963 and 1958; and for Industries, 1963—Continued**

Industry code, industry group or industry and item	All types of establishments, total	Producing establishments										Non-producing establishments
		Total	Mines only				Mines with preparation plants				Separately operated preparation plants	
			Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
1429 Crushed and Broken Stone, n.e.c.												
Establishments.....number..	494	488	60	-	60	-	407	6	399	2	21	6
Employees.....do....	8,081	18,021	374	-	374	-	6,759	(D)	(D)	(D)	294	60
Value added in mining.....\$1,000..	111,503	111,664	4,575	-	4,575	-	103,065	(D)	(D)	(D)	4,024	( <sup>2</sup> )
144 Sand and Gravel												
Establishments.....number..	4,616	4,568	742	-	716	26	3,794	-	3,380	414	32	48
Employees.....do....	40,142	139,921	2,237	-	2,148	89	36,159	-	30,461	5,698	449	221
Value added in mining.....\$1,000..	513,728	9514,156	24,301	-	23,184	1,117	485,071	-	418,626	66,445	4,779	( <sup>2</sup> )
1442 Construction Sand and Gravel												
Establishments.....number..	4,419	4,372	723	-	697	26	3,624	-	3,222	402	25	47
Employees.....do....	36,394	136,173	2,146	-	2,057	89	32,750	-	27,210	5,540	362	221
Value added in mining.....\$1,000..	459,288	459,716	23,473	-	22,356	1,117	432,223	-	367,741	64,482	4,020	( <sup>2</sup> )
1443 Glass Sand												
Establishments.....number..	39	39	-	-	-	-	38	-	33	5	1	-
Employees.....do....	1,570	1,570	-	-	-	-	(D)	-	1,398	(D)	(D)	-
Value added in mining.....\$1,000..	22,649	22,649	-	-	-	-	(D)	-	21,409	(D)	(D)	-
1444 Molding Sand												
Establishments.....number..	93	92	11	-	11	-	79	-	79	-	2	1
Employees.....do....	927	1927	(D)	-	(D)	-	790	-	790	-	(D)	-
Value added in mining.....\$1,000..	12,838	(D)	(D)	-	(D)	-	12,232	-	12,232	-	(D)	(D)
1445 Industrial Sand, n.e.c.												
Establishments.....number..	65	65	8	-	8	-	53	-	46	7	4	-
Employees.....do....	1,251	1,251	(D)	-	(D)	-	(D)	-	1,063	(D)	51	-
Value added in mining.....\$1,000..	18,953	18,953	(D)	-	(D)	-	(D)	-	17,244	(D)	472	-
145 Clay and Related Minerals												
Establishments.....number..	423	416	225	12	211	2	191	3	188	-	-	7
Employees.....do....	8,316	8,304	977	(D)	804	(D)	7,327	33	7,294	-	-	12
Value added in mining.....\$1,000..	113,585	<sup>10</sup> 113,046	12,203	(D)	10,554	(D)	100,843	252	100,591	-	-	<sup>11</sup> 539
1452 Bentonite												
Establishments.....number..	44	44	19	1	17	1	25	1	24	-	-	-
Employees.....do....	811	811	59	(D)	(D)	(D)	752	(D)	(D)	-	-	-
Value added in mining.....\$1,000..	11,435	11,435	408	(D)	(D)	(D)	11,027	(D)	(D)	-	-	-
1453 Fire Clay												
Establishments.....number..	155	155	117	10	107	-	38	1	37	-	-	-
Employees.....do....	979	979	533	60	473	-	446	(D)	(D)	-	-	-
Value added in mining.....\$1,000..	12,640	12,640	8,045	728	7,317	-	4,595	(D)	(D)	-	-	-
1454 Fuller's Earth												
Establishments.....number..	15	15	3	-	3	-	12	-	12	-	-	-
Employees.....do....	758	758	(D)	-	(D)	-	(D)	-	(D)	-	-	-
Value added in mining.....\$1,000..	9,071	9,071	(D)	-	(D)	-	(D)	-	(D)	-	-	-
1455 Kaolin and Ball Clay												
Establishments.....number..	48	47	11	-	10	1	36	-	36	-	-	1
Employees.....do....	3,346	(D)	(D)	-	(D)	(D)	3,170	-	3,170	-	-	(D)
Value added in mining.....\$1,000..	49,841	(D)	(D)	-	(D)	(D)	48,201	-	48,201	-	-	(D)

See footnotes at end of table.

TABLE 1. Selected Statistics for Industries, Except Service Industries, for Major Industry Groups, 1963 and 1958; and for Industries, 1963—Continued

Industry code, industry group or industry and item	All types of establishments, total	Producing establishments									Nonproducing establishments	
		Total	Mines only				Mines with preparation plants					Separately operated preparation plants
			Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
1456 Feldspar												
Establishments.....number..	31	27	10	-	10	-	17	-	17	-	-	4
Employees.....do....	461	449	9	-	9	-	440	-	440	-	-	12
Value added in mining.....\$1,000..	6,117	5,578	59	-	59	-	5,519	-	5,519	-	-	539
1459 Clay and Related Minerals, n.e.c.												
Establishments.....number..	130	128	65	1	64	-	63	1	62	-	-	2
Employees.....do....	1,961	(D)	200	(D)	(D)	-	(D)	(D)	(D)	-	-	(D)
Value added in mining.....\$1,000..	24,481	(D)	2,021	(D)	(D)	-	(D)	(D)	(D)	-	-	(D)
147 Chemical and Fertilizer Minerals												
Establishments.....number..	235	212	80	14	58	8	114	34	68	12	18	23
Employees.....do....	21,040	20,899	2,986	550	(D)	(D)	17,276	7,996	6,257	3,023	637	141
Value added in mining.....\$1,000..	433,313	433,357	82,330	5,440	(D)	(D)	331,806	155,086	106,133	70,587	19,221	( <sup>2</sup> )
1472 Barite												
Establishments.....number..	54	50	26	1	25	-	24	1	21	2	-	4
Employees.....do....	1,434	1,430	115	(D)	(D)	-	1,315	(D)	1,005	(D)	-	4
Value added in mining.....\$1,000..	11,107	11,122	1,381	(D)	(D)	-	9,741	(D)	6,121	(D)	-	( <sup>2</sup> )
1473 Fluorspar												
Establishments.....number..	30	27	11	9	2	-	10	6	4	-	6	3
Employees.....do....	804	796	(D)	(D)	(D)	-	(D)	642	(D)	-	(D)	8
Value added in mining.....\$1,000..	8,869	8,869	(D)	(D)	(D)	-	(D)	6,382	(D)	-	(D)	-
1474 Potash, Soda, and Borate Minerals												
Establishments.....number..	23	18	-	-	-	-	18	9	3	6	-	5
Employees.....do....	7,050	(D)	-	-	-	-	(D)	4,541	(D)	(D)	-	(D)
Value added in mining.....\$1,000..	156,151	(D)	-	-	-	-	(D)	95,824	(D)	(D)	-	(D)
1475 Phosphate Rock												
Establishments.....number..	66	61	18	3	15	-	33	1	31	1	10	5
Employees.....do....	5,624	(D)	(D)	(D)	239	-	(D)	(D)	4,222	(D)	499	(D)
Value added in mining.....\$1,000..	94,889	(D)	(D)	(D)	3,202	-	(D)	(D)	67,718	(D)	17,055	(D)
1476 Rock Salt												
Establishments.....number..	25	24	4	-	4	-	18	14	3	1	2	1
Employees.....do....	2,443	(D)	4	-	4	-	(D)	(D)	(D)	(D)	(D)	(D)
Value added in mining.....\$1,000..	49,539	(D)	54	-	54	-	(D)	(D)	(D)	(D)	(D)	(D)
1477 Sulfur												
Establishments.....number..	17	13	11	-	3	8	2	-	-	2	-	4
Employees.....do....	2,603	(D)	(D)	-	2	(D)	(D)	-	-	(D)	-	(D)
Value added in mining.....\$1,000..	100,349	(D)	(D)	-	10	(D)	(D)	-	-	(D)	-	(D)
1479 Chemical & Fertilizer Mining, n.e.c.												
Establishments.....number..	20	19	10	1	9	-	9	3	6	-	-	1
Employees.....do....	1,082	(D)	(D)	(D)	(D)	-	923	(D)	(D)	-	-	(D)
Value added in mining.....\$1,000..	12,409	(D)	(D)	(D)	(D)	-	12,149	(D)	(D)	-	-	(D)
149 Miscellaneous Nonmetallic Minerals												
Establishments.....number..	453	431	182	21	160	1	249	21	224	4	-	22
Employees.....do....	5,477	15,436	551	(D)	462	(D)	4,856	(D)	3,818	(D)	-	41
Value added in mining.....\$1,000..	78,325	78,313	7,499	(D)	6,212	(D)	70,814	(D)	56,380	(D)	-	12

See footnotes at end of table.

TABLE 1. Selected Statistics for Industries, Except Service Industries, for Major Industry Groups, 1963 and 1958; and for Industries, 1963—Continued

Industry code, industry group or industry and item	All types of establishments, total	Producing establishments									Nonproducing establishments
		Total	Mines only				Mines with preparation plants				Separately operated preparation plants
			Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods	
1492 Gypsum											
Establishments....number..	37	34	9	-	9	-	25	3	21	1	-
Employees.....do....	458	(D)	(D)	-	(D)	-	427	(D)	302	(D)	(D)
Value added in mining.....\$1,000..	7,753	(D)	(D)	-	(D)	-	7,116	(D)	5,010	(D)	(D)
1493 Mica											
Establishments....number..	34	30	12	-	12	-	18	-	18	-	4
Employees.....do....	398	379	42	-	42	-	337	-	337	-	19
Value added in mining.....\$1,000..	3,925	3,916	576	-	576	-	3,340	-	3,340	-	9
1494 Native Asphalt and Bitumens											
Establishments....number..	13	13	4	1	3	-	9	3	6	-	-
Employees.....do....	422	422	19	(D)	(D)	-	403	196	207	-	-
Value added in mining.....\$1,000..	6,333	6,333	126	(D)	(D)	-	6,207	3,543	2,664	-	-
1495 Pumice and Pumicite											
Establishments....number..	85	84	33	1	32	-	51	-	51	-	1
Employees.....do....	247	(D)	(D)	(D)	(D)	-	199	-	199	-	(D)
Value added in mining.....\$1,000..	4,198	(D)	(D)	(D)	(D)	-	2,813	-	2,813	-	(D)
1496 Talc, Soapstone, and Pyrophyllite											
Establishments....number..	65	61	37	16	20	1	24	6	15	3	4
Employees.....do....	1,276	1,274	133	(D)	57	(D)	1,112	298	489	325	2
Value added in mining.....\$1,000..	13,746	13,740	1,908	(D)	706	(D)	11,832	5,138	3,972	2,722	6
1497 Natural Abrasives, Except Sand											
Establishments....number..	23	23	9	-	9	-	14	3	11	-	-
Employees.....do....	294	294	30	-	30	-	264	37	227	-	-
Value added in mining.....\$1,000..	4,125	4,125	167	-	167	-	3,958	691	3,267	-	-
1498 Peat											
Establishments....number..	109	104	61	1	60	-	43	-	43	-	5
Employees.....do....	504	502	195	(D)	(D)	-	307	-	307	-	2
Value added in mining.....\$1,000..	5,626	5,632	2,239	(D)	(D)	-	3,393	-	3,393	-	(2)
1499 Nonmetallic Minerals, n.e.c.											
Establishments....number..	87	82	17	2	15	-	65	6	59	-	5
Employees.....do....	1,878	1,861	54	(D)	(D)	-	1,807	57	1,750	-	17
Value added in mining.....\$1,000..	32,619	32,609	454	(D)	(D)	-	32,155	234	31,921	-	10

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Includes data for certain central offices and related facilities which were not distributed by detailed types of operation.

<sup>2</sup>Not shown since the cost of supplies, purchased fuel and electric energy, contract work, and purchased machinery installed exceeds capital expenditures.

<sup>3</sup>Includes data for metal mining and oil and gas field services establishments in Alaska and data for the Hawaiian operations of one service establishment primarily engaged in metal mining services in Nevada.

<sup>4</sup>Excludes data for Alaska but includes data for the Hawaiian operations of one service establishment primarily engaged in metal mining services in Nevada.

<sup>5</sup>Excludes data for Alaska.

<sup>6</sup>Includes data for metal mining services establishments in Alaska.

<sup>7</sup>Figures for the Lignite Industry are included with those for the Bituminous Coal Industry.

<sup>8</sup>Includes data for the Hawaii operations of one service establishment primarily engaged in metal mining services in Nevada.

<sup>9</sup>Includes data for one nonproducing establishment in the Molding Sand Industry.<sup>1</sup>

<sup>10</sup>Includes data for three nonproducing establishments in the Kaolin and Ball Clay and Clay and Related Minerals, N.E.C., Industries.

<sup>11</sup>Represents the Feldspar Industry only.

**TABLE 2. Selected Statistics for Industries, Except Service Industries, for Geographic Areas: 1963**

Geographic area and item	All types of establishments, total	Producing establishments									Non-producing establishments	
		Total	Mines only				Mines with preparation plants					Separately operated preparation plants.
			Total	Under-ground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
UNITED STATES												
Establishments.....number..	32,063	30,079	20,910	5,152	2,400	13,358	8,109	971	6,495	643	1,060	1,984
Employees.....do....	497,724	1,492,909	218,026	45,822	19,757	152,447	236,863	96,915	116,749	23,199	26,460	4,815
Value added in mining.....\$1,000..	14,607,806	14,644,036	9,948,322	417,095	326,178	9,205,049	3,684,776	1,309,181	2,031,184	344,411	1,014,387	( <sup>2</sup> )
NEW ENGLAND												
Establishments.....number..	344	335	74	2	71	1	258	4	248	6	3	9
Employees.....do....	3,705	13,672	501	(D)	497	(D)	3,021	100	2,854	67	62	32
Value added in mining.....\$1,000..	41,941	41,918	4,937	(D)	4,923	(D)	36,237	947	34,474	816	744	23
Maine:												
Establishments.....number..	43	40	14	1	13	-	26	-	25	1	-	3
Employees.....do....	3,209	(D)	(D)	(D)	30	-	(D)	-	(D)	(D)	-	(D)
Value added in mining.....\$1,000..	31,517	(D)	(D)	(D)	213	-	(D)	-	(D)	(D)	-	(D)
New Hampshire:												
Establishments.....number..	32	32	4	-	4	-	28	-	28	-	-	-
Employees.....do....	217	217	18	-	18	-	199	-	199	-	-	-
Value added in mining.....\$1,000..	2,184	2,184	165	-	165	-	2,019	-	2,019	-	-	-
Vermont:												
Establishments.....number..	43	43	17	-	17	-	26	4	22	-	-	-
Employees.....do....	4,846	4,846	4,258	-	4,258	-	588	100	488	-	-	-
Value added in mining.....\$1,000..	48,780	48,780	42,752	-	42,752	-	6,028	947	5,081	-	-	-
Massachusetts:												
Establishments.....number..	128	125	16	-	16	-	107	-	106	1	2	3
Employees.....do....	1,655	1,634	148	-	148	-	(D)	-	1,413	(D)	(D)	21
Value added in mining.....\$1,000..	16,902	16,874	1,351	-	1,351	-	(D)	-	14,694	(D)	(D)	28
Rhode Island:												
Establishments.....number..	20	19	4	-	4	-	15	-	14	1	-	1
Employees.....do....	4,204	(D)	(D)	-	(D)	-	151	-	(D)	(D)	-	(D)
Value added in mining.....\$1,000..	42,018	(D)	(D)	-	(D)	-	1,620	-	(D)	(D)	-	(D)
Connecticut:												
Establishments.....number..	78	76	19	1	17	1	56	-	53	3	1	2
Employees.....do....	3,819	(D)	(D)	(D)	(D)	(D)	760	-	725	35	(D)	(D)
Value added in mining.....\$1,000..	310,952	(D)	(D)	(D)	(D)	(D)	11,289	-	10,873	416	(D)	(D)
MIDDLE ATLANTIC												
Establishments.....number..	3,809	3,721	2,628	1,385	476	767	967	126	723	118	126	88
Employees.....do....	59,844	159,654	17,518	8,820	3,573	5,600	37,743	15,916	16,241	5,586	2,387	190
Value added in mining.....\$1,000..	715,631	718,279	182,587	74,427	43,418	64,742	502,774	219,104	214,854	68,816	33,351	( <sup>2</sup> )
New York:												
Establishments.....number..	485	470	208	-	59	149	259	10	242	7	3	15
Employees.....do....	5,69,461	15,69,429	6,996	-	6,199	797	6,525	1,656	4,611	258	206	32
Value added in mining.....\$1,000..	6128,105	6128,261	610,023	-	61,736	8,287	112,897	29,912	79,830	3,155	5,813	( <sup>2</sup> )
New Jersey:												
Establishments.....number..	156	153	23	2	21	-	127	3	116	8	3	3
Employees.....do....	43,760	143,752	4,455	(D)	(D)	-	2,964	362	2,497	105	117	8
Value added in mining.....\$1,000..	455,232	455,228	43,964	(D)	(D)	-	49,741	5,597	43,122	1,022	1,523	4
Pennsylvania:												
Establishments.....number..	3,168	3,098	2,397	1,383	396	618	581	113	365	103	120	70
Employees.....do....	46,544	146,394	16,076	(D)	(D)	4,758	26,203	13,898	7,082	5,223	2,064	150
Value added in mining.....\$1,000..	532,459	534,955	168,804	(D)	(D)	56,455	340,136	183,595	91,902	64,639	26,015	( <sup>2</sup> )

See footnotes at end of table.

**TABLE 2. Selected Statistics for Industries, Except Service Industries, for Geographic Areas: 1963—Continued**

Geographic area and item	All types of establishments, total	Producing establishments									Non-producing establishments	
		Total	Mines only				Mines with preparation plants					Separately operated preparation plants.
			Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
EAST NORTH CENTRAL												
Establishments.....number..	4,160	3,921	2,160	192	472	1,496	1,724	108	1,521	95	37	239
Employees.....do....	57,620	<sup>1</sup> 57,222	15,680	<sup>7</sup> 4,682	2,822	<sup>7</sup> 8,176	38,005	12,189	23,917	1,899	1,250	398
Value added in mining.....\$1,000..	997,630	998,318	389,859	<sup>7</sup> 60,439	40,750	<sup>7</sup> 288,670	579,906	146,401	403,231	30,274	28,553	( <sup>2</sup> )
Ohio:												
Establishments.....number..	1,360	1,274	768	135	188	445	492	34	416	42	14	86
Employees.....do....	<sup>8</sup> 14,954	(D)	(D)	(D)	1,632	(D)	9,981	2,836	6,136	1,009	442	(D)
Value added in mining.....\$1,000..	212,251	(D)	(D)	(D)	23,382	(D)	145,337	37,668	91,757	15,912	6,427	(D)
Indiana:												
Establishments.....number..	653	621	354	19	79	256	264	16	239	9	3	32
Employees.....do....	6,814	(D)	(D)	84	(D)	1,026	4,968	1,375	3,395	198	36	(D)
Value added in mining.....\$1,000..	104,985	(D)	(D)	464	(D)	22,291	72,991	12,595	57,205	3,191	535	(D)
Illinois:												
Establishments.....number..	1,192	1,121	709	16	69	624	405	50	330	25	7	71
Employees.....do....	<sup>8</sup> 18,683	18,602	4,947	(D)	(D)	(D)	13,253	5,858	6,874	521	402	81
Value added in mining.....\$1,000..	433,695	433,858	196,623	(D)	(D)	(D)	222,717	75,073	139,044	8,600	14,518	( <sup>2</sup> )
Michigan:												
Establishments.....number..	611	569	257	17	69	171	305	7	287	11	7	42
Employees.....do....	10,889	10,708	4,003	2,723	236	1,044	6,364	(D)	4,217	(D)	341	181
Value added in mining.....\$1,000..	<sup>3</sup> 213,230	213,257	96,251	44,222	2,997	49,032	110,112	(D)	87,464	(D)	6,894	( <sup>2</sup> )
Wisconsin:												
Establishments.....number..	344	336	72	5	67	-	258	1	249	8	6	8
Employees.....do....	<sup>3</sup> 3,097	(D)	(D)	(D)	(D)	-	<sup>3</sup> 2,514	(D)	2,453	(D)	49	(D)
Value added in mining.....\$1,000..	<sup>3</sup> 37,474	(D)	(D)	(D)	(D)	-	<sup>3</sup> 28,749	(D)	27,761	(D)	679	(D)
WEST NORTH CENTRAL												
Establishments.....number..	2,909	2,745	1,446	40	277	1,129	1,241	34	1,124	83	58	164
Employees.....do....	38,071	<sup>1</sup> 36,947	11,246	<sup>9</sup> 273	2,729	<sup>9</sup> 8,244	21,463	3,354	17,040	1,176	2,030	1,124
Value added in mining.....\$1,000..	1,005,927	1,015,029	521,680	<sup>9</sup> 4,153	59,234	<sup>9</sup> 458,293	405,623	43,550	348,842	13,231	87,726	( <sup>2</sup> )
Minnesota:												
Establishments.....number..	329	319	75	4	71	-	239	1	231	7	5	10
Employees.....do....	12,938	<sup>1</sup> 12,848	(D)	(D)	(D)	-	7,972	(D)	7,358	(D)	(D)	127
Value added in mining.....\$1,000..	364,972	365,338	(D)	(D)	(D)	-	251,152	(D)	243,944	(D)	(D)	( <sup>2</sup> )
Iowa:												
Establishments.....number..	289	287	40	12	28	-	244	7	227	10	3	2
Employees.....do....	<sup>6</sup> 2,646	(D)	(D)	(D)	140	-	2,336	71	2,155	110	(D)	(D)
Value added in mining.....\$1,000..	<sup>6</sup> 33,080	(D)	(D)	(D)	1,838	-	30,388	958	28,392	1,038	(D)	(D)
Missouri:												
Establishments.....number..	382	363	80	8	68	4	276	20	231	25	7	19
Employees.....do....	18,476	<sup>1</sup> 6,764	427	44	378	5	5,639	2,103	2,887	649	36	712
Value added in mining.....\$1,000..	64,655	71,127	7,587	165	7,295	127	63,244	17,852	37,898	7,494	296	( <sup>2</sup> )
North Dakota:												
Establishments.....number..	155	144	77	5	20	52	61	1	60	-	6	11
Employees.....do....	<sup>8</sup> 1,112	(D)	439	(D)	(D)	403	547	(D)	(D)	-	(D)	(D)
Value added in mining.....\$1,000..	65,773	(D)	55,624	(D)	(D)	55,234	7,017	(D)	(D)	-	(D)	(D)
South Dakota:												
Establishments.....number..	128	115	48	5	34	9	63	1	59	3	4	13
Employees.....do....	<sup>8</sup> 2,533	2,430	83	8	73	2	2,287	(D)	(D)	(D)	60	103
Value added in mining.....\$1,000..	25,580	25,477	1,241	33	923	285	22,816	(D)	(D)	(D)	1,420	103

See footnotes at end of table.



**TABLE 2. Selected Statistics for Industries, Except Service Industries, for Geographic Areas: 1963—Continued**

Geographic area and item	All types of establishments, total	Producing establishments									Separately operated preparation plants	Non-producing establishments
		Total	Mines only				Mines with preparation plants					
			Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
WEST NORTH CENTRAL—Continued												
Nebraska:												
Establishments.....number..	317	289	110	-	15	95	172	-	150	22	7	28
Employees.....do.....	<sup>8</sup> 1,586	(D)	(D)	-	(D)	356	1,057	-	904	153	(D)	(D)
Value added in mining.....\$1,000..	63,431	(D)	(D)	-	(D)	51,246	10,681	-	9,143	1,538	(D)	(D)
Kansas:												
Establishments.....number..	1,309	1,228	1,016	6	41	969	186	4	166	16	26	81
Employees.....do.....	<sup>4</sup> 9,583	9,478	7,431	46	74	7,311	1,712	139	1,392	181	335	105
Value added in mining.....\$1,000..	<sup>4</sup> 389,329	389,940	352,681	408	823	351,450	20,650	1,972	16,415	2,263	16,609	( <sup>2</sup> )
SOUTH ATLANTIC												
Establishments.....number..	4,215	4,053	2,926	1,889	236	801	1,010	232	682	96	117	162
Employees.....do.....	80,310	79,978	25,303	<sup>9</sup> 19,196	1,602	<sup>9</sup> 4,414	52,665	27,052	19,513	6,100	2,010	332
Value added in mining.....\$1,000..	992,265	992,325	216,234	<sup>5</sup> 128,689	18,305	<sup>9</sup> 69,240	725,273	359,901	271,814	93,558	50,818	( <sup>2</sup> )
Delaware and Maryland:												
Establishments.....number..	178	175	78	42	30	6	94	4	88	2	3	3
Employees.....do.....	<sup>4</sup> 2,432	<sup>1</sup> 4,411	<sup>4</sup> 391	(D)	135	(D)	1,696	(D)	1,625	(D)	36	21
Value added in mining.....\$1,000..	<sup>4</sup> 35,284	<sup>4</sup> 34,549	<sup>4</sup> 4,310	(D)	2,494	(D)	29,649	(D)	26,550	(D)	590	735
Virginia:												
Establishments.....number..	936	933	707	665	27	15	197	47	132	18	29	3
Employees.....do.....	<sup>3</sup> 15,455	<sup>3</sup> 15,442	<sup>3</sup> 7,484	6,706	579	<sup>3</sup> 199	7,550	2,732	3,312	1,506	408	13
Value added in mining.....\$1,000..	<sup>3</sup> 142,339	<sup>3</sup> 142,339	<sup>3</sup> 41,978	37,133	3,162	<sup>3</sup> 1,683	93,652	30,120	38,193	25,339	6,709	-
West Virginia:												
Establishments.....number..	2,497	2,355	2,003	1,175	59	769	280	172	60	48	72	142
Employees.....do.....	46,108	(D)	(D)	10,724	(D)	3,997	28,873	23,768	1,073	4,032	(D)	(D)
Value added in mining.....\$1,000..	580,484	(D)	(D)	88,830	(D)	64,105	399,713	323,717	13,804	62,192	(D)	(D)
North Carolina:												
Establishments.....number..	165	158	33	3	30	-	124	3	116	5	1	7
Employees.....do.....	<sup>8</sup> 2,471	(D)	(D)	(D)	(D)	-	(D)	(D)	2,108	66	(D)	(D)
Value added in mining.....\$1,000..	31,251	(D)	(D)	(D)	(D)	-	(D)	(D)	29,762	448	(D)	(D)
South Carolina:												
Establishments.....number..	67	67	9	-	8	1	57	1	50	6	1	-
Employees.....do.....	<sup>4</sup> 1,660	<sup>4</sup> 1,660	(D)	-	(D)	(D)	(D)	(D)	1,456	(D)	(D)	-
Value added in mining.....\$1,000..	<sup>4</sup> 19,047	<sup>4</sup> 19,047	(D)	-	(D)	(D)	(D)	(D)	17,165	(D)	(D)	-
Georgia:												
Establishments.....number..	163	160	61	2	58	1	97	5	86	6	2	3
Employees.....do.....	<sup>8</sup> 5,583	5,576	(D)	(D)	(D)	(D)	5,168	347	4,621	200	(D)	7
Value added in mining.....\$1,000..	75,699	75,654	(D)	(D)	(D)	(D)	71,044	4,560	64,367	2,117	(D)	45
Florida:												
Establishments.....number..	209	205	35	2	24	9	161	-	150	11	9	4
Employees.....do.....	<sup>8</sup> 6,185	6,148	261	(D)	(D)	(D)	5,316	-	5,274	42	(D)	37
Value added in mining.....\$1,000..	108,408	108,328	4,725	(D)	(D)	(D)	82,229	-	81,973	289	(D)	80
EAST SOUTH CENTRAL												
Establishments.....number..	2,934	2,834	1,992	1,155	180	657	758	260	442	56	84	100
Employees.....do.....	44,554	44,420	17,022	<sup>10</sup> 9,677	1,796	<sup>10</sup> 5,549	26,299	14,921	9,103	2,205	1,169	134
Value added in mining.....\$1,000..	705,551	708,173	342,089	<sup>10</sup> 63,080	26,550	<sup>10</sup> 252,459	337,350	158,993	151,413	26,571	28,734	( <sup>2</sup> )
Kentucky:												
Establishments.....number..	1,824	1,759	1,338	850	45	443	360	182	152	26	61	65
Employees.....do.....	26,407	26,350	12,349	<sup>11</sup> 8,123	<sup>11</sup> 527	3,699	13,096	8,592	3,260	1,244	905	57
Value added in mining.....\$1,000..	327,591	328,284	140,375	<sup>11</sup> 53,141	<sup>11</sup> 15,229	72,005	165,613	76,990	71,383	17,240	22,296	( <sup>2</sup> )

See footnotes at end of table.

**TABLE 2. Selected Statistics for Industries, Except Service Industries, for Geographic Areas: 1963—Continued**

Geographic area and item	All types of establishments, total	Producing establishments									Nonproducing establishments	
		Total	Mines only				Mines with preparation plants					Separately operated preparation plants
			Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
EAST SOUTH CENTRAL—Continued												
Tennessee:												
Establishments.....number..	490	480	289	204	71	14	180	28	138	14	11	10
Employees.....do....	<sup>12</sup> 6,843	(D)	1,449	819	(D)	(D)	(D)	2,010	2,821	(D)	(D)	(D)
Value added in mining.....\$1,000..	<sup>12</sup> 89,880	(D)	10,839	5,572	(D)	(D)	(D)	24,212	46,952	(D)	(D)	(D)
Alabama:												
Establishments.....number..	350	343	172	101	51	20	166	50	105	11	5	7
Employees.....do....	8,558	(D)	(D)	735	(D)	<sup>13</sup> 114	7,140	4,319	2,361	460	43	(D)
Value added in mining.....\$1,000..	113,943	(D)	(D)	4,367	(D)	<sup>13</sup> 16,109	87,580	57,791	26,045	3,744	1,160	(D)
Mississippi:												
Establishments.....number..	270	252	193	-	13	180	52	-	47	5	7	18
Employees.....do....	<sup>4</sup> 2,836	<sup>4</sup> 2,813	(D)	-	(D)	1,863	(D)	-	675	(D)	(D)	23
Value added in mining.....\$1,000..	<sup>4</sup> 175,185	<sup>4</sup> 176,367	(D)	-	(D)	164,020	(D)	-	7,033	(D)	(D)	( <sup>2</sup> )
WEST SOUTH CENTRAL												
Establishments.....number..	8,707	8,209	7,242	26	174	7,042	492	19	428	45	475	498
Employees.....do....	115,739	114,858	93,867	124	878	92,865	10,396	901	7,561	1,934	10,595	881
Value added in mining.....\$1,000..	6,905,154	6,919,161	6,168,809	1,095	12,217	6,155,497	157,167	15,146	96,277	45,744	593,185	( <sup>2</sup> )
Arkansas:												
Establishments.....number..	352	309	222	6	37	179	75	6	60	9	12	43
Employees.....do....	3,783	3,703	1,696	24	<sup>14</sup> 520	<sup>14</sup> 1,152	1,839	99	1,361	379	168	80
Value added in mining.....\$1,000..	102,854	104,829	76,706	266	<sup>14</sup> 15,980	<sup>14</sup> 60,460	24,532	1,292	19,051	4,189	3,591	( <sup>2</sup> )
Louisiana:												
Establishments.....number..	917	853	704	-	16	688	75	4	60	11	74	64
Employees.....do....	21,842	(D)	18,202	-	135	18,067	2,031	577	(D)	(D)	(D)	(D)
Value added in mining.....\$1,000..	2,344,830	(D)	2,161,573	-	1,524	2,160,049	29,617	12,101	(D)	(D)	(D)	(D)
Oklahoma:												
Establishments.....number..	1,833	1,752	1,582	20	35	1,527	93	8	71	14	77	81
Employees.....do....	22,252	(D)	18,692	100	188	18,479	1,389	(D)	(D)	161	(D)	(D)
Value added in mining.....\$1,000..	717,751	(D)	630,678	829	1,346	628,503	17,643	(D)	(D)	1,530	(D)	(D)
Texas:												
Establishments.....number..	5,605	5,295	4,734	-	86	4,648	249	1	237	11	312	310
Employees.....do....	67,862	67,346	55,202	-	<sup>15</sup> 1,520	<sup>15</sup> 53,682	5,127	(D)	4,114	(D)	7,007	516
Value added in mining.....\$1,000..	3,739,719	3,748,504	3,300,367	-	<sup>15</sup> 24,681	<sup>15</sup> 3,275,171	84,862	(D)	51,931	(D)	363,275	( <sup>2</sup> )
MOUNTAIN												
Establishments.....number..	2,936	2,465	1,662	413	262	987	706	160	514	32	97	471
Employees.....do....	66,038	65,210	24,534	4,835	5,602	14,097	35,220	21,011	13,185	1,024	5,456	1,058
Value added in mining.....\$1,000..	1,977,460	1,980,316	1,194,887	83,453	111,894	996,501	663,715	350,842	292,352	20,521	126,760	( <sup>2</sup> )
Montana:												
Establishments.....number..	338	286	213	44	24	145	68	15	43	10	5	52
Employees.....do....	6,372	6,256	4,927	404	(D)	(D)	666	147	409	110	663	116
Value added in mining.....\$1,000..	97,951	99,517	85,926	3,178	(D)	(D)	7,559	1,186	5,216	1,157	6,032	( <sup>2</sup> )
Idaho:												
Establishments.....number..	142	95	31	11	20	-	63	13	47	3	1	47
Employees.....do....	3,077	2,972	(D)	31	(D)	-	(D)	2,492	305	(D)	(D)	105
Value added in mining.....\$1,000..	39,065	39,028	(D)	129	(D)	-	(D)	30,973	6,410	(D)	(D)	37
Wyoming:												
Establishments.....number..	333	294	208	14	21	173	68	8	59	1	18	39
Employees.....do....	<sup>3</sup> 6,392	<sup>3</sup> 6,356	<sup>3</sup> 3,336	<sup>3</sup> 354	90	2,892	(D)	(D)	1,742	(D)	(D)	36
Value added in mining.....\$1,000..	<sup>3</sup> 422,296	<sup>3</sup> 423,367	<sup>3</sup> 347,926	<sup>3</sup> 7,548	4,961	335,417	(D)	(D)	44,547	(D)	(D)	( <sup>2</sup> )

See footnotes at end of table.

**TABLE 2. Selected Statistics for Industries, Except Service Industries, for Geographic Areas: 1963—Continued**

Geographic area and item	All types of establishments, total	Producing establishments									Nonproducing establishments	
		Total	Mines only				Mines with preparation plants					Separately operated preparation plants.
			Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
MOUNTAIN—Continued												
Colorado:												
Establishments.....number..	731	633	443	175	57	211	175	58	109	8	15	98
Employees.....do....	10,309	10,142	3,956	993	312	2,651	5,763	4,682	985	96	423	167
Value added in mining.....\$1,000..	241,649	242,077	126,100	14,319	1,322	110,459	104,366	87,088	16,153	1,125	11,611	( <sup>2</sup> )
New Mexico:												
Establishments.....number..	625	579	462	36	29	397	77	12	60	5	40	46
Employees.....do....	13,524	13,303	5,406	1,651	730	1,641	6,593	5,701	489	403	1,304	221
Value added in mining.....\$1,000..	609,136	609,685	407,795	1,659,996	24,656	1,637,143	160,653	142,006	6,782	11,865	41,237	( <sup>2</sup> )
Arizona:												
Establishments.....number..	246	174	73	23	43	7	95	17	73	5	6	72
Employees.....do....	14,114	13,990	1,997	1,261	724	12	11,262	(D)	7,404	(D)	436	124
Value added in mining.....\$1,000..	274,934	275,156	33,088	18,371	14,478	239	232,456	(D)	185,236	(D)	9,612	( <sup>2</sup> )
Utah:												
Establishments.....number..	332	274	168	99	21	48	96	31	63	2	10	58
Employees.....do....	9,668	9,440	4,451	1,356	2,593	9502	(D)	(D)	735	(D)	(D)	228
Value added in mining.....\$1,000..	257,275	257,688	170,472	935,164	45,731	989,577	(D)	(D)	10,582	(D)	(D)	( <sup>2</sup> )
Nevada:												
Establishments.....number..	189	130	61	11	47	3	67	6	60	1	2	59
Employees.....do....	2,481	2,328	(D)	(D)	(D)	2	(D)	(D)	1,138	(D)	(D)	153
Value added in mining.....\$1,000..	37,119	36,951	(D)	(D)	(D)	144	(D)	(D)	17,637	(D)	(D)	168
PACIFIC												
Establishments.....number..	2,049	1,796	780	50	251	479	953	28	813	112	63	253
Employees.....do....	31,613	30,948	14,278	155	778	13,345	15,137	1,584	10,609	2,944	1,385	669
Value added in mining.....\$1,000..	1,266,247	1,270,517	930,210	1,996	8,940	919,274	275,540	13,763	216,900	44,880	64,767	( <sup>2</sup> )
Washington:												
Establishments.....number..	236	196	59	14	41	4	135	9	114	12	2	40
Employees.....do....	1,782	1,615	(D)	(D)	41	(D)	1,532	424	908	200	(D)	167
Value added in mining.....\$1,000..	23,891	24,867	(D)	(D)	520	(D)	24,008	5,779	17,001	1,228	(D)	( <sup>2</sup> )
Oregon:												
Establishments.....number..	204	178	38	4	30	4	137	2	109	26	3	26
Employees.....do....	1,938	1,914	154	(D)	(D)	(D)	1,742	(D)	(D)	523	18	24
Value added in mining.....\$1,000..	17,656	17,643	3,357	(D)	(D)	(D)	15,119	(D)	(D)	3,276	167	13
California:												
Establishments.....number..	1,440	1,292	651	32	154	465	585	15	499	71	56	148
Employees.....do....	17,267,92	17,26,491	1713,860	118	429	1713,313	11,143	515	8,438	2,190	1,488	306
Value added in mining.....\$1,000..	171,179,157	171,180,152	17894,744	1,691	5,364	17887,689	220,940	5,428	175,460	40,058	64,462	( <sup>2</sup> )
Alaska:												
Establishments.....number..	125	86	14	-	8	6	72	2	68	2	-	39
Employees.....do....	809	636	170	-	(D)	(D)	466	(D)	(D)	(D)	-	173
Value added in mining.....\$1,000..	41,171	43,483	32,039	-	(D)	(D)	11,444	(D)	(D)	(D)	-	( <sup>2</sup> )
Hawaii:												
Establishments.....number..	44	44	18	-	18	-	24	-	23	1	2	-
Employees.....do....	315	315	(D)	-	(D)	-	254	-	(D)	(D)	(D)	-
Value added in mining.....\$1,000..	4,909	4,909	(D)	-	(D)	-	4,013	-	(D)	(D)	(D)	-

Standard Notes: - Represents zero. applicable.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not

Footnotes continued on next page.

**TABLE 2. Selected Statistics for Industries, Except Service Industries, for Geographic Areas: 1963—Continued**

Footnotes for Table 2--Continued

<sup>1</sup>Includes data for certain central offices and related facilities which were not distributed by detailed types of operation.

<sup>2</sup>Not shown since the cost of supplies, purchased fuels and electric energy, contract work, and purchased machinery installed exceed capital expenditures.

<sup>3</sup>Includes figures for 2 mining services establishments.

<sup>4</sup>Includes figures for 1 mining services establishment.

<sup>5</sup>Excludes figures for central offices and related facilities in the Anthracite Industry.

<sup>6</sup>Includes figures for 3 mining services establishments.

<sup>7</sup>Figures for 1 nonmetallic minerals mining establishment are excluded under combination methods and included with underground mines.

<sup>8</sup>Excludes data for separately reported central offices and related facilities.

<sup>9</sup>Figures for 2 establishments are excluded from combination methods and included with underground mines.

<sup>10</sup>Figures for 2 underground mines are included with those for combination methods.

<sup>11</sup>Figures for 2 underground mines are included with those for open-pit mines.

<sup>12</sup>Includes figures for 4 mining services establishments.

<sup>13</sup>Figures for 2 establishments are excluded from combination methods and included with open-pit mines.

<sup>14</sup>Figures for 1 combination mine are included with those for open-pit mines.

<sup>15</sup>Figures for 5 combination mines are included with those for open-pit mines.

<sup>16</sup>Figures for 1 combination mine are included with those for underground mines.

<sup>17</sup>Includes figures for 5 mining services establishments.

**TABLE 3. General Statistics for Nonproducing Establishments, by Industry Group and Industry: 1963 and 1958**

Ind. code	Industry group and industry <sup>1</sup>	1963									1958	
		Establishments, total		All employees		Production, development, and exploration workers			Cost of supplies, etc. and purchased machinery (\$1,000)	Capital expenditures (\$1,000)	All employees (number)	Capital expenditures (\$1,000)
		Total (number)	With 20 or more employees (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)				
	All mineral industries.....	1,984	34	4,834	26,557	3,355	6,366	18,140	178,279	140,012	24,624	279,739
10	Metal mining.....	496	11	1,991	10,417	1,655	3,147	8,742	65,820	61,143	(D)	(D)
1011	Iron ores.....	28	3	846	5,362	727	1,461	4,508	57,364	51,726	491	12,811
1021	Copper ores.....	70	-	211	1,121	189	345	1,025	1,772	1,838	338	12,199
1031	Lead and zinc ores.....	58	2	178	742	131	233	604	1,087	842	420	1,011
	Lead ores subindustry.....	43	1	121	457	84	121	368	842	585	278	386
	Zinc ores subindustry.....	15	1	57	285	47	112	236	245	257	142	625
104	Gold and silver ores.....	229	3	391	1,617	316	640	1,364	2,970	3,665	363	1,788
1042	Lode gold.....	131	1	217	854	189	369	762	1,328	1,688	256	938
1043	Placer gold.....	48	-	30	121	30	67	121	690	708	252	2,252
1044	Silver ores.....	50	2	144	642	97	204	481	952	1,269	61	598
106	Ferroalloy ores.....	39	2	193	964	132	251	664	1,813	1,963	220	713
1064	Tungsten ores and Ferroalloy	30	1	144	856	90	182	575	1,642	1,857	180	618
1069	ores, n.e.c.....											
109	Miscellaneous metal ores.....	71	1	(D)	(D)	(D)	(D)	(D)	(D)	1,109	(D)	(D)
1094	Uranium-radium-vanadium ores..	38	-	69	256	64	105	238	721	750	238	1,181
1099	Metallic ores, n.e.c.....	16	1	78	290	77	76	289	48	337	46	319
11	Anthracite mining (Anthracite)....	5	-	10	39	-	-	-	11,555	12,185	9	22
12	Bituminous coal and lignite mining.....	39	1	149	913	114	212	642				
13	Oil and gas extraction.....	1,303	17	2,069	12,441	1,029	1,990	6,343	87,198	53,252	(D)	(D)
1311	Crude petroleum and natural gas.	1,296	17	2,061	12,375	1,021	1,973	6,277	76,218	42,819	21,890	220,985
1321	Natural gas liquids.....	7	-	8	66	8	17	66	10,980	10,433	(D)	(D)
14	Nonmetallic minerals mining.....	141	5	615	2,747	557	1,017	2,413	13,706	13,432	337	15,799
1411	Dimension stone.....	9	-	14	38	13	18	34	13	8	(D)	(D)
	Dimension stone, n.e.c., subindustry.....	9	-	14	38	13	18	34	13	8	27	6
1421	Crushed and broken stone.....	32	3	167	574	125	223	406	709	356	41	53
	Crushed and broken limestone subindustry.....	26	1	107	369	89	158	294	516	324	25	25
	Crushed and broken stone, n.e.c., subindustry.....	6	2	60	205	36	65	112	193	32	16	28
1441	Sand and gravel.....	48	1	221	924	221	369	817	(D)	(D)	(D)	(D)
	Construction sand and gravel subindustry.....	47	1	221	924	220	367	817	790	362	36	155
145	Clay and related minerals.....	7	-	31	123	30	62	122	90	629	23	205
1456	Feldspar.....	4	-	12	43	11	22	42	70	626	(NA)	(NA)
147	Chemical and fertilizer mineral mining.....	23	1	141	919	128	263	869	11,908	11,864	162	15,221
149	Miscellaneous nonmetallic minerals mining.....	22	-	41	169	40	82	165	(D)	(D)	37	151
1493	Mica.....	4	-	19	89	19	40	89	33	42	12	136

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>General statistics for some industries or subindustries are not shown separately in this table in order to avoid disclosing figures for individual companies or because of the relatively small size of the statistics. Such industries or subindustries are shown below with the number of establishments in each industry or subindustry (and in parentheses the number of employees or employment size range): SIC 1051, Bauxite, 1 (0-4); SIC 1062, Manganese ores, 9 (49); SIC 1092, Mercury ores, 17 (20-49); SIC 1211, Bituminous coal, 37 (100-249); SIC 1212, Lignite, 2 (0-4); SIC 1455, Kaolin and ball clay, 1 (10-19); SIC 1459, Clay and related minerals, n.e.c., 2 (0-4); SIC 1472, Barite, 4 (4); SIC 1473, Fluorspar, 3 (8); SIC 1474, Potash, soda, and borate minerals, 5 (76); SIC 1475, Phosphate rock, 5 (18); SIC 1476, Rock salt, 1 (0-4); SIC 1477, Sulphur, 4 (20-49); SIC 1479, Chemical and fertilizer minerals, n.e.c., 1 (10-19); SIC 1492, Gypsum, 3 (0-4); SIC 1495, Pumice and pumicite, 1 (0-4); SIC 1496, Talc, soapstone, and pyrophyllite, 4 (0-4); SIC 1498, Peat, 5 (2) and SIC 1499, Nonmetallic minerals, n.e.c., 5 (17).

<sup>2</sup>Number of employees include but capital expenditures exclude data for Alaska.

# Fuels, Electric Energy, and Selected Supplies Used

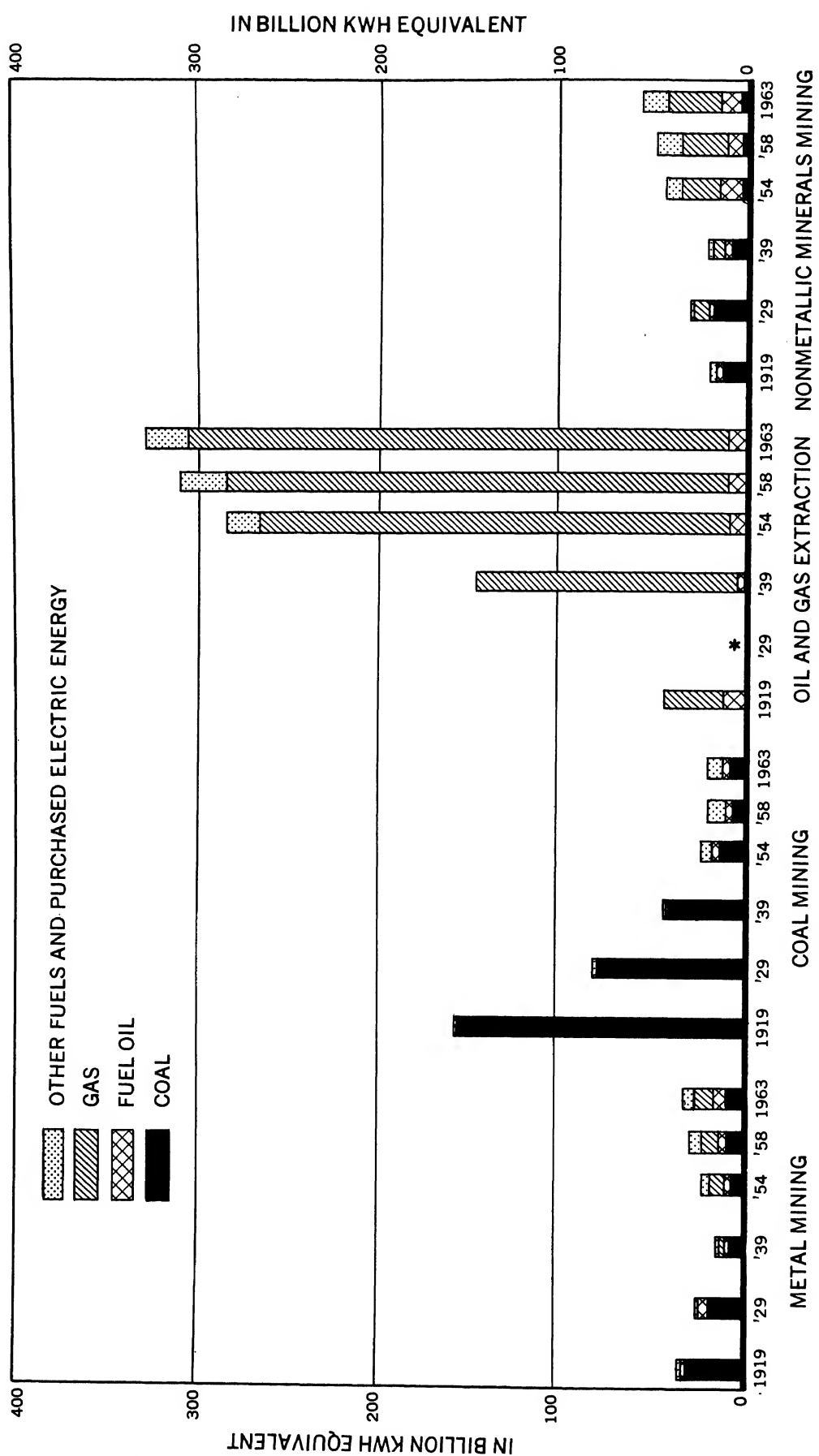
## Chapter 6

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# ENERGY USED IN THE MINERAL INDUSTRIES IN THE UNITED STATES: 1919-1963



**TABLE 1. Fuels and Electric Energy Used by Major Industry Group:  
1963 and Earlier Years**

Ind. code	Industry group and year	Energy used <sup>1</sup> (kwh. equivalent)		Fuels used <sup>2</sup>				Electric energy (million kwh.)		
		Total (million)	Per produc- tion worker (1,000)	Coal (1,000 short tons.)	Fuel oils (1,000 barrels)	Gas (million cu. ft.)	Gasoline (1,000 gallons)	Purchased	Generated by reporting companies	
									Used	Sold
	All mineral industries: <sup>3</sup>									
	Including oil and gas extraction..1963....	436,435	906	2,650	18,656	1,084,118	263,083	22,516	5,942	412
	1958....	405,631	717	2,427	14,995	996,834	(*)	16,394	4,401	828
	1954....	373,168	576	2,804	16,316	931,643	(*)	13,153	3,652	891
	1939 <sup>6</sup> ....	224,898	291	7,186	6,115	489,052	77,614	6,329	2,070	125
	1919 <sup>7</sup> ....	<sup>8</sup> 250,624	253	26,088	9,913	103,432	6,675	(NA)	(NA)	(NA)
	Excluding oil and gas extraction.....1963....	107,091	369	2,650	13,158	119,922	105,533	15,820	3,313	370
	1958....	95,271	286	2,427	9,291	102,576	(*)	12,119	2,846	779
	1954....	88,055	203	<sup>5</sup> 2,797	11,714	89,218	(*)	10,405	2,338	856
	1939 <sup>6</sup> ....	77,131	123	7,160	3,770	26,720	59,645	5,677	1,884	121
	1929 <sup>9</sup> ....	133,790	165	14,675	4,047	25,536	16,566	5,382	2,081	(NA)
	1919 <sup>7</sup> ....	<sup>8</sup> 209,193	233	26,016	3,833	2,841	4,757	(NA)	(NA)	(NA)
10	Metal mining.....1963....	31,911	513	1,204	3,909	29,916	10,244	5,678	2,654	339
	1958....	27,800	384	<sup>10</sup> 1,052	2,628	28,388	(*)	<sup>10</sup> 3,876	2,227	577
	1954....	21,677	257	<sup>9</sup> 741	2,076	24,889	(*)	3,184	1,576	502
	1939 <sup>10</sup> ....	14,628	163	967	1,109	8,784	8,525	2,306	616	33
	1929 <sup>10</sup> ....	24,727	214	2,274	2,392	1,408	1,829	1,965	1,007	(NA)
	1919....	<sup>8</sup> 33,978	247	3,767	1,745	1,812	2,150	(NA)	(NA)	(NA)
11	Anthracite mining.....1963....	2,692	261	<sup>11</sup> 184	346	2	5,534	376	58	(D)
	1958....	3,881	194	<sup>11</sup> 313	286	-	(*)	564	68	(D)
	1954....	7,198	218	<sup>11</sup> 738	334	1	(*)	731	109	195
	1939....	19,716	237	2,534	82	-	4,105	591	374	7
	1929....	42,694	299	5,679	1	-	92	470	478	(NA)
	1919....	<sup>8</sup> 71,293	484	9,578	1	-	58	(NA)	(NA)	(NA)
12	Bituminous coal and lignite mining....1963....	16,071	135	<sup>12</sup> 706	2,216	982	23,612	5,014	47	(D)
	1958....	14,972	91	<sup>12</sup> 544	1,854	535	(*)	4,353	84	(D)
	1954....	15,411	77	<sup>12</sup> 841	2,135	507	(*)	3,629	133	146
	1939 <sup>10</sup> ....	22,587	61	2,577	167	103	6,685	1,958	616	75
	1929 <sup>10</sup> ....	37,766	82	4,524	17	303	755	2,044	465	(NA)
	1919....	<sup>8</sup> 85,559	157	11,129	3	866	798	(NA)	(NA)	(NA)
13	Oil and gas extraction.....1963....	329,344	1,716	(NA)	<sup>13</sup> 5,498	<sup>14</sup> 964,196	157,550	6,696	2,629	42
	1958....	310,360	1,451	(NA)	<sup>13</sup> 5,707	<sup>14</sup> 894,251	(*)	4,275	1,555	49
	1954....	285,113	1,211	7	<sup>13</sup> 4,603	<sup>14</sup> 842,425	(*)	2,748	1,314	35
	1939 <sup>15</sup> ....	147,767	992	26	2,345	462,332	17,969	652	186	4
	1919 <sup>15</sup> ....	<sup>8</sup> 41,431	442	73	6,080	100,591	2,016	(NA)	(NA)	(NA)
14	Nonmetallic minerals mining.....1963....	56,417	574	556	6,687	89,022	66,143	4,752	554	(D)
	1958....	48,618	508	464	4,521	73,653	(*)	3,326	467	(D)
	1954....	43,769	451	477	7,168	63,821	(*)	2,861	520	13
	1939 <sup>6</sup> ....	20,200	249	1,082	2,412	17,833	40,330	822	278	6
	1929 <sup>9</sup> ....	28,603	302	2,198	1,637	23,825	13,890	903	131	(NA)
	1919 <sup>7</sup> ....	<sup>8</sup> 18,363	287	1,541	2,084	163	1,654	(NA)	(NA)	(NA)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Represents purchased electric energy and the kilowatt-hour equivalent of all fuels used for power or heat. Includes fuels for which only total costs were reported and which are not shown in succeeding columns of this table. For conversion factors used to convert to this international unit of energy, see Introduction, Energy Used.

<sup>2</sup>Represents purchased fuels and fuels produced and used in the same establishment for power or heat.

<sup>3</sup>For 1963, 1958, and 1954 excludes, but for 1939 includes, data for dimension and crushed and broken stone, clay, and gypsum mines operated as parts of manufacturing establishments. For 1939 and earlier years, excludes data for service industries.

<sup>4</sup>Quantity data for gasoline were not collected. The cost of gasoline was included in the cost of other fuels purchased.

<sup>5</sup>Excludes data for Placer gold in Alaska.

<sup>6</sup>Excludes data for Alaska and Hawaii.

<sup>7</sup>Excludes data for common clay, shale, sand, and gravel establishments and for all establishments in Hawaii.

<sup>8</sup>Excludes data for purchased electric energy.

<sup>9</sup>Excludes data for common clay and shale establishments and for all establishments in Alaska and Hawaii.

<sup>10</sup>Excludes data for Alaska.

<sup>11</sup>Includes anthracite produced and used at the same establishment for power or heat: For 1963, 153 thousand tons; for 1958, 212 thousand tons; for 1954, 595 thousand tons.

<sup>12</sup>Includes bituminous coal and lignite produced and used at the same establishment for power or heat: For 1963, 633 thousand tons; for 1958, 450 thousand tons; for 1954, 761 thousand tons.

<sup>13</sup>Includes crude petroleum produced and used as a fuel at the same establishment: For 1963, 563 thousand barrels; for 1958, 651 thousand barrels; for 1954, 664 thousand barrels.

<sup>14</sup>Includes gas produced and used at the same establishment for power or heat: For 1963, 831 billion cubic feet; for 1958, 759 billion cubic feet; for 1954, 698 billion cubic feet.

<sup>15</sup>Excludes data for oil and gas field services establishments. In 1954 and 1958, such establishments used about 10 percent of all fuels reported used in Major Group 13, and to about 8 percent for 1963. For 1939, excludes data for Alaska.



**TABLE 2. Fuels and Electric Energy Used by Geographic Area:  
1963 and Earlier Years**

(1963, 1958, and 1954 data exclude stone, clay, and gypsum mines operated as parts of manufacturing establishments. 1939 includes such data but excludes data for service industries)

Division, State, and year	Total energy used <sup>1</sup> (million kwh. equivalent)	Selected fuels used <sup>2</sup>			Electric energy (million kwh)	
		Coal (1,000 short tons)	Fuel oils (1,000 barrels)	Gas (million cu. ft.)	Purchased	Generated and used
United States, total.....1963....	436,435	2,650	18,656	1,084,118	22,516	5,942
.....1958....	405,631	2,427	14,995	996,834	16,394	4,401
.....1954....	373,168	2,804	16,316	931,643	13,153	3,652
.....1939 <sup>3 4</sup> ..	224,898	7,186	6,115	489,052	6,329	2,070
New England.....1963....	790	1	218	17	106	(Z)
.....1958....	711	6	55	7	83	(Z)
.....1954....	541	2	134	3	74	3
.....1939....	404	25	38	-	40	1
Maine.....1963....	31	-	5	-	4	-
.....1958....	74	4	1	-	3	(Z)
.....1954....	34	-	7	-	6	-
.....1939....	16	1	2	-	2	-
New Hampshire.....1963....	39	-	10	-	5	-
.....1958....	34	(Z)	(Z)	-	3	(Z)
.....1954....	27	-	5	-	2	-
.....1939....	18	1	1	-	1	-
Vermont.....1963....	165	1	48	-	38	-
.....1958....	189	2	5	-	30	-
.....1954....	171	1	56	-	40	2
.....1939....	93	7	8	-	19	1
Massachusetts.....1963....	353	-	120	-	31	-
.....1958....	223	-	9	7	23	-
.....1954....	140	-	22	3	14	-
.....1939....	157	6	22	-	12	-
Rhode Island.....1963....	27	-	1	-	3	(Z)
.....1958....	29	-	3	-	2	-
.....1954....	26	-	4	-	-	-
.....1939....	25	2	-	-	1	-
Connecticut.....1963....	175	-	34	17	25	-
.....1958....	162	-	36	-	22	(Z)
.....1954....	143	1	40	-	12	1
.....1939....	95	8	5	-	5	-
Middle Atlantic.....1963....	13,042	458	2,081	5,854	2,256	62
.....1958....	14,926	771	1,426	5,903	2,251	126
.....1954....	19,300	1,437	1,733	7,022	2,324	185
.....1939....	30,072	3,332	354	8,274	1,409	620
New York.....1963....	3,176	211	414	186	419	(Z)
.....1958....	2,766	162	285	1,068	336	9
.....1954....	3,256	230	268	1,481	342	1
.....1939....	1,700	107	93	1,598	113	8
New Jersey.....1963....	910	8	173	399	154	1
.....1958....	655	10	138	164	109	(Z)
.....1954....	699	44	158	-	120	6
.....1939....	652	61	47	-	43	11
Pennsylvania.....1963....	8,956	239	1,494	5,269	1,683	61
.....1958....	11,505	599	1,003	4,861	1,806	117
.....1954....	15,345	1,163	1,307	5,541	1,862	178
.....1939....	27,720	3,164	214	6,676	1,253	601
East North Central.....1963....	18,707	627	2,688	10,978	2,667	546
.....1958....	18,184	488	1,480	18,178	1,985	380
.....1954....	16,318	551	1,814	16,521	1,575	293
.....1939....	17,935	1,706	316	10,487	638	288
Ohio.....1963....	3,753	116	671	1,452	433	4
.....1958....	2,907	11	595	863	363	15
.....1954....	2,677	37	680	1,068	321	14
.....1939....	2,715	218	103	1,871	119	29
Indiana.....1963....	1,877	38	315	493	323	13
.....1958....	1,630	35	159	827	246	(D)
.....1954....	1,369	45	156	725	198	14
.....1939....	1,888	201	36	292	94	11
Illinois.....1963....	5,735	154	516	5,124	1,147	65
.....1958....	8,647	109	385	14,889	974	(D)
.....1954....	7,909	199	515	12,871	671	66
.....1939....	8,569	866	127	4,641	239	97
Michigan.....1963....	6,681	318	1,028	3,908	689	464
.....1958....	4,304	328	264	1,533	316	305
.....1954....	3,668	264	263	1,849	301	187
.....1939....	4,525	403	41	3,683	157	150
Wisconsin.....1963....	661	1	158	1	75	(Z)
.....1958....	696	5	75	66	86	2
.....1954....	695	6	200	8	84	12
.....1939....	238	18	9	-	29	1
West North Central.....1963....	28,116	659	2,376	48,390	1,481	1,636
.....1958....	23,645	614	2,357	31,569	1,254	857
.....1954....	18,755	172	1,987	34,390	1,395	201
.....1939....	7,324	376	161	11,383	395	23

See footnotes at end of table.

**TABLE 2. Fuels and Electric Energy Used by Geographic Area:  
1963 and Earlier Years—Continued**

(1963, 1958, and 1954 data exclude stone, clay, and gypsum mines operated as parts of manufacturing establishments. 1939 includes such data but excludes data for service industries)

Division, State, and year	Total energy used <sup>1</sup> (million kwh. equivalent)	Selected fuels used <sup>2</sup>			Electric energy (million kwh)	
		Coal (1,000 short tons)	Fuel oils (1,000 barrels)	Gas (million cu. ft.)	Purchased	Generated and used
West North Central—Continued						
Minnesota.....1963....	10,906	635	1,401	8,836	496	1,544
.....1958....	7,824	554	1,513	(D)	388	(D)
.....1954....	2,645	90	711	68	391	111
.....1939....	1,715	200	26	-	94	-
Iowa.....1963....	636	2	164	53	47	3
.....1958....	941	39	102	25	37	1
.....1954....	682	3	177	13	118	1
.....1939....	201	20	11	18	27	4
Missouri.....1963....	1,286	2	227	896	268	10
.....1958....	1,305	3	181	(D)	296	(Z)
.....1954....	1,255	6	256	722	303	1
.....1939....	786	54	36	177	162	5
North Dakota.....1963....	1,856	6	43	5,089	31	1
.....1958....	805	1	119	(D)	9	(D)
.....1954....	890	7	113	1,249	14	3
.....1939....	180	21	-	-	5	-
South Dakota.....1963....	495	14	58	452	83	28
.....1958....	484	16	30	445	72	(D)
.....1954....	759	61	91	471	30	57
.....1939....	557	60	2	240	11	-
Nebraska.....1963....	1,614	(Z)	65	3,700	63	1
.....1958....	1,457	1	72	(D)	25	(Z)
.....1954....	692	(Z)	103	1,080	13	1
.....1939....	56	1	13	1	4	-
Kansas.....1963....	11,323	-	418	29,364	493	49
.....1958....	10,829	-	340	26,854	427	33
.....1954....	11,832	5	536	30,787	526	27
.....1939....	3,829	20	73	10,947	92	14
South Atlantic.....1963....	19,637	573	2,518	18,733	3,451	14
.....1958....	14,697	234	1,792	14,368	2,850	37
.....1954....	12,953	349	2,310	9,432	2,291	86
.....1939....	8,876	593	640	7,222	815	177
Delaware, Maryland, and District of Columbia.....1963....	465	5	112	40	49	-
.....1958....	346	(D)	58	(D)	37	1
.....1954....	476	17	105	98	16	-
.....1939....	388	37	32	1	11	7
Virginia.....1963....	3,647	294	250	650	400	1
.....1958....	1,635	82	106	380	288	4
.....1954....	1,389	90	184	2	196	6
.....1939....	701	69	20	-	98	6
West Virginia.....1963....	6,818	210	411	7,876	1,577	11
.....1958....	6,922	117	294	10,300	1,543	29
.....1954....	5,885	208	401	6,455	1,175	29
.....1939....	5,662	416	19	6,028	558	127
North Carolina.....1963....	880	40	133	523	92	(Z)
.....1958....	723	(D)	50	(D)	101	-
.....1954....	504	20	121	13	77	1
.....1939....	176	16	14	-	12	-
South Carolina.....1963....	483	2	78	629	62	(Z)
.....1958....	282	(D)	41	(D)	28	-
.....1954....	288	1	69	223	41	-
.....1939....	133	11	4	-	13	-
Georgia.....1963....	3,212	6	386	6,418	299	2
.....1958....	1,880	1	205	3,135	190	3
.....1954....	1,317	8	142	2,607	118	1
.....1939....	770	32	61	1,193	28	4
Florida.....1963....	4,132	16	1,148	2,597	972	(Z)
.....1958....	2,909	(Z)	1,038	226	663	1
.....1954....	3,094	5	1,288	34	668	49
.....1939....	1,046	12	490	-	95	33
East South Central.....1963....	13,911	230	972	21,676	2,068	19
.....1958....	12,104	150	749	20,134	1,342	26
.....1954....	9,853	110	715	18,455	1,041	43
.....1939....	5,293	520	139	1,060	489	128
Kentucky.....1963....	4,614	72	369	5,131	1,232	11
.....1958....	4,143	44	286	5,508	639	(D)
.....1954....	3,514	45	296	5,792	430	32
.....1939....	2,322	230	17	1,014	177	32
Tennessee.....1963....	2,606	154	219	1,268	373	1
.....1958....	1,939	82	188	1,089	239	1
.....1954....	1,116	23	199	679	175	4
.....1939....	1,421	159	18	4	142	3
Alabama.....1963....	1,457	4	204	1,133	380	(Z)
.....1958....	1,491	23	170	967	417	(D)
.....1954....	1,253	40	105	452	409	-
.....1939....	1,366	128	25	13	166	93

See footnotes at end of table.

**TABLE 2. Fuels and Electric Energy Used by Geographic Area:  
1963 and Earlier Years—Continued**

(1963, 1958, and 1954 data exclude stone, clay, and gypsum mines operated as parts of manufacturing establishments. 1939 includes such data but excludes data for service industries)

Division, State, and year	Total energy used <sup>1</sup> (million kwh. equivalent)	Selected fuels used <sup>2</sup>			Electric energy (million kwh)		
		Coal	Fuel oils	Gas	Purchased	Generated and used	
		(1,000 short tons)	(1,000 barrels)	(million cu. ft.)			
East South Central—Continued							
Mississippi.....	1963.....	5,234	-	180	14,144	83	7
	1958.....	4,531	1	115	12,572	47	7
	1954.....	3,970	2	105	11,532	27	7
	1939.....	184	3	79	29	4	-
West South Central.....							
	1963.....	253,160	(2)	3,925	748,806	3,839	2,332
	1958.....	237,107	4	4,324	689,301	2,544	1,281
	1954.....	217,257	10	2,034	648,951	1,384	1,199
	1939.....	106,779	44	1,426	333,196	408	260
Arkansas.....	1963.....	3,805	(2)	73	10,449	139	4
	1958.....	3,750	(2)	49	10,051	88	3
	1954.....	3,793	2	85	10,803	126	1
	1939.....	3,306	15	27	10,085	26	-
Louisiana.....	1963.....	61,798	-	2,426	178,842	321	522
	1958.....	47,946	(2)	2,328	134,500	204	348
	1954.....	43,447	2	1,223	129,929	125	192
	1939.....	16,448	2	863	48,519	30	22
Oklahoma.....	1963.....	28,822	(2)	211	84,438	701	122
	1958.....	31,635	1	376	91,531	529	148
	1954.....	31,302	5	419	92,605	379	139
	1939.....	23,132	24	134	72,981	177	86
Texas.....	1963.....	158,735	(2)	1,215	475,077	2,678	1,684
	1958.....	153,776	3	1,571	453,219	1,723	782
	1954.....	138,715	1	307	415,614	754	867
	1939.....	63,893	3	402	201,611	175	152
Mountain.....							
	1963.....	50,544	47	1,918	128,362	4,956	962
	1958.....	46,435	78	1,429	115,837	2,881	1,385
	1954.....	38,360	237	3,042	94,395	1,959	1,327
	1939.....	18,819	539	972	37,199	1,390	449
Montana.....	1963.....	2,909	1	111	5,909	657	2
	1958.....	2,879	3	121	6,054	439	3
	1954.....	2,504	13	140	5,158	346	3
	1939.....	1,210	9	35	2,408	340	5
Idaho.....	1963.....	475	10	73	197	172	1
	1958.....	580	5	92	70	160	14
	1954.....	527	13	94	-	192	8
	1939.....	233	8	27	-	116	9
Wyoming.....	1963.....	10,134	2	479	26,354	644	120
	1958.....	7,161	8	181	18,918	227	92
	1954.....	9,546	79	285	25,256	132	101
	1939.....	1,856	103	71	2,959	25	38
Colorado.....	1963.....	5,457	8	139	14,279	470	18
	1958.....	6,230	12	164	14,632	337	16
	1954.....	4,872	75	410	8,977	290	24
	1939.....	2,113	228	26	275	197	22
New Mexico.....	1963.....	22,840	3	164	68,772	709	414
	1958.....	19,431	1	257	56,616	377	311
	1954.....	12,384	10	1,421	37,021	193	163
	1939.....	9,234	83	174	26,829	21	119
Arizona.....	1963.....	3,938	(2)	422	5,340	1,273	399
	1958.....	4,579	1	179	9,415	889	554
	1954.....	3,747	1	230	9,184	325	597
	1939.....	2,372	5	559	3,879	139	249
Utah.....	1963.....	3,623	19	217	7,418	797	8
	1958.....	4,722	32	244	10,132	268	383
	1954.....	3,851	44	137	8,797	267	394
	1939.....	1,346	76	31	849	427	1
Nevada.....	1963.....	968	3	313	93	234	(2)
	1958.....	853	16	191	-	184	12
	1954.....	929	2	325	2	214	37
	1939.....	455	27	49	-	125	6
Pacific.....							
	1963.....	38,528	55	1,960	101,302	1,692	371
	1958.....	37,822	82	1,473	101,535	1,204	309
	1954.....	39,874	411	2,547	102,474	1,110	315
	1939 <sup>4</sup> .....	29,396	18	2,034	80,221	726	123
Washington.....	1963.....	366	3	80	78	64	17
	1958.....	475	24	37	103	50	19
	1954.....	404	9	61	-	79	19
	1939.....	251	17	29	5	42	8
Oregon.....	1963.....	414	-	88	200	22	10
	1958.....	345	-	69	-	20	6
	1954.....	349	1	103	56	24	1
	1939.....	143	-	66	-	11	4
California.....	1963.....	37,061	-	1,674	101,014	1,583	323
	1958.....	36,286	-	1,206	101,432	1,133	244
	1954.....	38,425	1	2,289	102,416	1,004	245
	1939.....	29,002	1	1,939	80,216	673	111

See footnotes at end of table.

**TABLE 2. Fuels and Electric Energy Used by Geographic Area:  
1963 and Earlier Years—Continued**

(1963, 1958, and 1954 data exclude stone, clay, and gypsum mines operated as parts of manufacturing establishments. 1939 includes such data but excludes data for service industries)

Division, State, and year	Total energy used <sup>1</sup> (million kwh. equivalent)	Selected fuels used <sup>2</sup>			Electric energy (million kwh)	
		Coal (1,000 short tons)	Fuel oils (1,000 barrels)	Gas (million cu. ft.)	Purchased	Generated and used
Pacific—Continued						
Alaska.....1963....	644	52	112	10	18	21
.....1958....	652	58	73	-	1	40
.....1954....	677	(D)	89	2	1	50
.....1939....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Hawaii.....1963....	43	-	6	-	5	(Z)
.....1958....	64	-	85	-	(Z)	-
.....1954....	19	-	5	-	2	-
.....1939....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. (Z) Less than one-half of the unit of measure specified.

<sup>1</sup>Represents purchased electric energy and the kilowatt-hour equivalent of all fuels used for power or heat. For conversion factors used to convert to this international unit of energy, see Introduction, Energy Used.

<sup>2</sup>Represents purchased fuels and fuels produced and used in the same establishment for power or heat. Also, for 1963 and 1939, the quantity of gasoline was collected and, for 1958 and 1954, the cost of other fuels. In comparing the 1963 and 1958 fuels quantities with those for earlier years, note that quantity data were requested for fewer establishments in 1963 and 1958 and an undistributed fuels cost was tabulated for establishments reporting no fuels detail. For the magnitude of this undistributed cost by State in 1963, see table 4. The gasoline quantity, and cost of other fuels and undistributed fuels were used in computing the total energy used.

<sup>3</sup>The United States total includes, but detail excludes, data for a few establishments for which statistics could not be included in the individual State figures.

<sup>4</sup>Excludes data for Alaska and Hawaii.

TABLE 3. Purchased Fuels and Electric Energy Used.

Ind. code	Industry group and industry	All purchased fuels and purchased electric energy		Coal purchased		Fuel oil purchased			
						Distillate		Residual	
		Million kwh. equivalent	Cost (\$1,000)	1,000 short tons	Cost (\$1,000)	1,000 barrels	Cost (\$1,000)	1,000 barrels	Cost (\$1,000)
	All mineral industries:								
	1963.....	173,752	559,312	1,859	14,524	11,970	59,928	6,123	17,367
	1958.....	165,863	477,597	1,762	14,223	<sup>1</sup> 14,344	<sup>1</sup> 68,962	( <sup>1</sup> )	( <sup>1</sup> )
	MAJOR INDUSTRY GROUPS								
10	Metal mining:								
	1963.....	31,911	90,843	1,204	10,616	1,842	9,157	2,067	6,236
	1958.....	27,800	76,283	1,106	9,921	<sup>2</sup> 2,630	12,320	( <sup>1</sup> )	( <sup>1</sup> )
11	Anthracite mining:								
	1963.....	1,518	8,718	26	96	306	1,485	40	137
	1958.....	2,303	11,387	101	438	<sup>1</sup> 286	<sup>1</sup> 1,614	( <sup>1</sup> )	( <sup>1</sup> )
12	Bituminous coal and lignite mining:								
	1963.....	11,212	78,054	73	249	1,993	11,004	223	733
	1958.....	11,476	80,465	90	390	<sup>1</sup> 1,854	<sup>1</sup> 10,706	( <sup>1</sup> )	( <sup>1</sup> )
13	Oil and gas extraction:								
	1963.....	72,694	225,270	( <sup>3</sup> )	( <sup>3</sup> )	3,719	18,470	1,216	3,515
	1958.....	75,666	184,174	( <sup>3</sup> )	( <sup>3</sup> )	<sup>1</sup> 5,053	<sup>1</sup> 25,917	( <sup>1</sup> )	( <sup>1</sup> )
14	Nonmetallic minerals mining:								
	1963.....	56,417	156,427	556	3,563	4,110	19,812	2,577	6,746
	1958.....	48,618	125,288	464	3,473	<sup>1</sup> 4,521	<sup>1</sup> 18,405	( <sup>1</sup> )	( <sup>1</sup> )
	INDUSTRIES								
10	Metal mining.....	31,911	90,843	1,204	10,616	1,842	9,157	2,067	6,236
1011	Iron ores.....	17,725	41,170	972	8,408	929	4,640	1,744	5,281
1021	Copper ores.....	8,242	25,749	146	1,425	466	2,210	116	315
1031	Lead and zinc ores.....	1,082	6,667	10	81	75	375	17	49
	Lead ores.....	380	2,492	2	16	10	46	4	14
	Zinc ores.....	702	4,175	8	65	65	329	13	35
104	Gold and silver ores.....	901	3,236	64	572	37	208	43	166
1042	Lode gold.....	325	1,404	14	71	13	72	38	147
1043	Placer gold.....	439	999	48	475	13	71	1	1
1044	Silver ores.....	137	833	2	26	11	65	4	18
1051	Bauxite.....	234	472	-	-	5	26	3	15
106	Ferroalloy ores.....	550	2,634	(2)	1	19	118	42	126
1062	Manganese ores.....	31	158	(2)	1	(2)	2	3	11
1064	Tungsten ores and ferroalloy								
1069	ores, n.e.c.....	519	2,476	-	-	19	116	39	115
1081	Metal mining services.....	315	1,277	(2)	(2)	126	653	1	3
109	Miscellaneous metal ores.....	2,862	9,638	12	129	185	927	101	281
1092	Mercury ores.....	54	245	-	-	10	56	12	48
1093	Titanium ores.....	377	1,841	10	113	32	170	57	143
1094	Uranium-radium-vanadium ores.....	2,386	7,398	2	16	129	627	25	77
1099	Metallic ores, n.e.c.....	45	154	-	-	14	74	7	13
11	Anthracite mining.....	1,518	8,718	26	96	306	1,485	40	137
1111	Anthracite.....	1,268	7,558	26	86	207	984	33	127
1112	Anthracite mining services.....	250	1,160	(2)	10	99	501	7	10
12	Bituminous coal and lignite mining.....	11,212	78,054	73	249	1,993	11,004	223	733
1211	Bituminous coal.....	10,785	76,158	73	249	1,827	10,090	217	712
1212	Lignite.....	94	504	-	-	22	75	4	11
1213	Bituminous coal and lignite mining services.....	333	1,392	-	(2)	144	839	2	10
13	Oil and gas extraction.....	72,694	225,270	( <sup>3</sup> )	( <sup>3</sup> )	3,719	18,470	1,216	3,515
1311	Crude petroleum and natural gas.....	37,395	134,659	( <sup>3</sup> )	( <sup>3</sup> )	1,272	6,431	678	1,814
	Crude petroleum.....	32,716	125,631	( <sup>3</sup> )	( <sup>3</sup> )	1,067	5,447	660	1,763
	Natural gas.....	4,679	9,028	( <sup>3</sup> )	( <sup>3</sup> )	205	984	18	51
1321	Natural gas liquids.....	11,086	15,167	( <sup>3</sup> )	( <sup>3</sup> )	6	17	4	21
138	Oil and gas field services.....	24,213	75,444	( <sup>3</sup> )	( <sup>3</sup> )	2,441	12,022	534	1,680
1381	Drilling oil and gas wells.....	17,849	43,922	( <sup>3</sup> )	( <sup>3</sup> )	2,109	10,198	490	1,551
1382	Oil and gas exploration services.....	547	3,258	( <sup>3</sup> )	( <sup>3</sup> )	63	329	1	2
1389	Oil and gas field services, n.e.c....	5,817	28,264	( <sup>3</sup> )	( <sup>3</sup> )	269	1,495	43	127
14	Nonmetallic minerals mining.....	56,417	156,427	556	3,563	4,110	19,812	2,577	6,746
1411	Dimension stone.....	276	1,082	1	6	24	108	18	44
	Dimension limestone subindustry.....	23	145	(2)	(2)	3	15	1	2
	Dimension granite subindustry.....	185	549	(2)	4	11	53	17	42
	Dimension stone, n.e.c., subindustry..	68	388	(2)	2	10	40	(2)	(2)

See footnotes at end of table.

## 1963 and 1958, and by Industry, 1963

Gas purchased		Gasoline purchased		Cost of other purchased fuels (\$1,000)	Undistributed fuels cost (\$1,000)	Electric energy				Ind. code
Million cu. ft.	Cost (\$1,000)	Thousand gallons	Cost (\$1,000)			Purchased		Generated		
						Million kwh.	Cost (\$1,000)	Used (million kwh.)	Sold (million kwh.)	
253,140 237,724	61,022 43,474	263,083 (NA)	68,607 ( <sup>2</sup> )	31,135 <sup>2</sup> 91,782	41,851 58,042	22,516 16,394	264,878 201,115	5,942 4,401	412 828	
29,916 28,388	8,938 7,829	10,244 (NA)	2,600 ( <sup>2</sup> )	1,112 <sup>2</sup> 5,857	789 3,126	5,678 3,876	51,395 37,230	2,654 2,227	339 577	10
2 -	1 -	5,534 (NA)	780 ( <sup>2</sup> )	156 <sup>2</sup> 1,631	292 379	376 564	5,771 7,325	58 68	(D) (D)	11
982 535	441 212	23,612 (NA)	6,242 ( <sup>2</sup> )	1,063 <sup>2</sup> 6,689	1,598 5,753	5,014 4,353	56,724 56,715	47 84	(D) (D)	12
133,218 135,148	27,253 20,171	157,550 (NA)	42,324 ( <sup>2</sup> )	<sup>3</sup> 21,645 <sup>2</sup> 59,951	22,309 24,786	6,696 4,275	89,754 53,349	2,629 1,555	42 49	13
89,022 73,653	24,389 15,262	66,143 (NA)	16,661 ( <sup>2</sup> )	7,159 <sup>2</sup> 17,654	16,863 23,998	4,752 3,326	61,234 46,496	554 467	(D) (D)	14
29,916 11,921 10,823 587 191 396	8,938 3,709 2,898 209 73 136	10,244 2,942 2,502 508 198 310	2,600 745 619 118 44 74	1,112 214 460 49 18 31	789 344 34 52 48 4	5,678 1,557 2,571 622 259 363	51,395 17,829 17,788 5,734 2,233 3,501	2,654 1,746 813 15 - 15	339 243 (D) - - -	10 1011 1021 1031
80 64 - 16	41 33 - 8	375 171 72 132	104 48 18 38	3 2 1 -	125 96 10 19	198 76 41 81	2,017 935 423 659	33 28 2 3	(D) (D) (D) -	104 1042 1043 1044
620 573 41	166 199 12	332 226 96	64 59 26	12 8 8	4 11 6	12 251 6	185 2,112 92	- - -	- - -	1051 106 1062 1064
532 10	187 3	130 1,525	33 392	- 106	5 47	245 2	2,020 73	- (2)	- -	1069 1081
5,302 - 3 5,296 3	1,713 - 1 1,711 1	1,834 35 213 1,546 40	499 11 52 424 12	260 4 - 251 5	172 16 - 147 9	465 9 131 322 3	5,657 110 1,362 4,145 40	47 (2) - 44 3	- - - - -	109 1092 1093 1094 1099
2 - 2	1 - 1	5,534 4,863 671	780 599 181	156 124 32	292 197 95	376 359 17	5,771 5,441 330	58 58 -	(D) (D) -	11 1111 1112
982 972 10 -	441 438 3 -	23,612 22,211 334 1,067	6,242 5,845 90 307	1,063 1,014 4 45	1,598 1,456 17 125	5,014 4,997 14 3	56,724 56,354 304 66	47 47 - -	- - - -	12 1211 1212 1213
133,218 72,724 60,885 11,839 33,002 27,492 25,002 51 2,439	27,253 15,254 13,156 2,098 6,471 5,528 5,000 14 514	157,550 60,494 53,309 7,185 1,685 95,371 22,351 8,334 64,686	42,324 17,832 15,729 2,103 651 23,841 5,645 2,310 15,886	<sup>3</sup> 21,645 <sup>3</sup> 8,030 <sup>3</sup> 7,414 <sup>3</sup> 616 <sup>3</sup> 334 <sup>3</sup> 13,281 <sup>3</sup> 11,190 <sup>3</sup> 333 <sup>3</sup> 1,758	22,309 7,472 7,251 221 - 14,837 8,127 114 6,596	6,696 5,631 5,440 191 775 290 144 9 137	89,754 77,826 74,871 2,955 7,673 4,255 2,211 156 1,888	2,629 376 358 18 1,767 486 351 (D) (D)	- - - - - - - - -	42 1311 - - 42 1321 138 1381 1382 1389
89,022 250 - 250 -	24,389 43 - 43 -	66,143 749 63 528 158	16,661 182 18 106 58	7,159 137 24 53 60	16,863 124 18 27 79	4,752 27 4 14 9	61,234 438 68 221 149	554 - - - -	(D) - - - -	14 1411 - - -

TABLE 3. Purchased Fuels and Electric Energy Used,

Ind. code	Industry group and industry	All purchased fuels and purchased electric energy		Coal purchased		Fuel oil purchased			
		Million kwh. equivalent	Cost (\$1,000)	1,000 short tons	Cost (\$1,000)	Distillate		Residual	
						1,000 barrels	Cost (\$1,000)	1,000 barrels	Cost (\$1,000)
	INDUSTRIES—Continued								
	Nonmetallic minerals mining—Continued								
1421	Crushed and broken stone.....	9,951	45,890	141	1,154	1,677	8,180	518	1,419
	Crushed and broken limestone subindustry.....	6,484	32,890	26	224	1,284	6,247	308	782
	Crushed and broken granite subindustry....	812	3,750	6	32	155	808	32	77
	Crushed and broken stone, n.e.c., subindustry.....	2,655	9,250	109	898	238	1,125	178	560
1441	Sand and gravel.....	10,176	46,315	157	830	1,193	5,740	286	765
	Construction sand and gravel subindustry.....	7,962	40,295	74	250	1,003	4,829	203	522
	Glass sand subindustry.....	979	2,794	29	226	62	336	23	76
	Molding sand subindustry.....	352	1,369	(Z)	(Z)	62	266	32	94
	Industrial sand, n.e.c., subindustry..	883	1,857	54	354	66	309	28	73
145	Clay and related minerals.....	8,278	16,489	82	551	532	2,749	313	909
1452	Bentonite.....	614	1,195	(Z)	1	16	78	74	204
1453	Fire clay.....	176	876	-	-	10	55	5	13
1454	Fuller's earth.....	748	1,356	(Z)	1	19	69	29	87
1455	Kaolin and ball clay.....	2,547	5,111	1	5	100	458	74	225
1456	Feldspar.....	155	791	-	-	56	263	(Z)	3
1459	Clay and related minerals, n.e.c.....	4,038	7,160	81	544	331	1,826	131	377
147	Chemical and fertilizer minerals.....	25,695	39,324	170	995	474	1,965	1,296	3,166
1472	Barite.....	271	1,205	(Z)	2	19	107	3	11
1473	Fluorspar.....	331	1,051	24	146	22	114	9	35
1474	Potash, soda, borate minerals.....	8,279	14,274	-	-	29	127	648	1,585
1475	Phosphate rock.....	4,619	13,260	146	847	357	1,392	632	1,526
1476	Rock salt.....	502	1,466	-	-	24	126	-	-
1477	Sulfur.....	11,583	7,596	-	-	18	76	2	5
1479	Chemical-fertilizer minerals, n.e.c..	110	472	-	-	5	23	2	4
1481	Nonmetallic minerals services.....	219	672	3	15	21	118	1	3
149	Miscellaneous minerals, n.e.c.....	1,822	6,655	2	12	189	952	145	440
1492	Gypsum.....	122	521	-	-	19	95	18	55
1493	Mica.....	113	440	2	12	20	119	(Z)	-
1494	Native asphalt and bitumens.....	75	520	-	-	22	116	(Z)	1
1495	Pumice and pumicite.....	63	260	-	-	2	11	(Z)	3
1496	Talc, soapstone, and pyrophyllite....	151	931	-	-	32	154	4	9
1497	Natural abrasives.....	70	308	-	-	24	112	-	-
1498	Peat.....	101	514	(Z)	(Z)	1	4	(Z)	(Z)
1499	Nonmetallic minerals, n.e.c.....	1,127	3,161	-	-	69	341	123	372

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available.  
 (X) Not applicable. (Z) Less than one-half of the unit of measure specified.  
 n.e.c. Not elsewhere classified.

<sup>1</sup>The figures for residual fuel oil are included with those for distillate fuel oil.

<sup>2</sup>The cost of gasoline purchased is included in the cost of other purchased fuels.

<sup>3</sup>The cost of coal purchased in the oil and gas extraction industries is included with the cost of other purchased fuels.

## 1963 and 1958, and by Industry, 1963—Continued

Gas purchased		Gasoline purchased		Cost of other purchased fuels  (\$1,000)	Undistributed fuels cost  (\$1,000)	Electric energy				Ind. code
Million cu. ft.	Cost (\$1,000)	Thousand gallons	Cost (\$1,000)			Purchased		Generated		
						Million kwh.	Cost (\$1,000)	Used (million kwh.)	Sold (million kwh.)	
3,402	1,061	30,817	7,745	1,821	4,703	1,298	19,807	49	(D)	1421
1,514	455	24,587	6,092	1,238	3,922	910	13,930	36	(D)	-
630	197	2,171	611	96	46	135	1,883	-	-	-
1,258	409	4,059	1,042	487	735	253	3,994	13	-	-
2,958	1,059	25,743	6,338	4,039	10,498	1,067	17,046	38	(Z)	1441
496	171	24,337	5,972	3,902	10,127	889	14,522	17	(Z)	-
1,419	521	644	173	27	105	104	1,330	-	-	-
343	210	276	70	93	171	26	465	-	-	-
700	157	486	123	17	95	48	729	21	-	-
17,112	4,966	3,436	942	650	703	444	5,019	(Z)	-	145
1,308	353	141	38	3	4	41	514	-	-	1452
30	10	258	77	274	208	15	239	-	-	1453
2,021	803	204	56	19	-	28	321	-	-	1454
6,296	2,114	933	232	184	18	212	1,875	(Z)	-	1455
37	19	153	39	-	7	40	460	(Z)	-	1456
7,420	1,667	1,747	500	170	466	108	1,610	-	-	1459
62,702	16,194	3,174	859	317	134	1,638	15,694	460	(D)	147
451	117	328	90	4	43	68	831	-	-	1472
86	25	104	30	77	29	35	595	20	(Z)	1473
21,202	7,585	777	226	125	2	457	4,624	344	(Z)	1474
2,208	769	1,323	370	67	15	941	8,274	-	-	1475
1,207	316	286	41	17	9	73	957	9	-	1476
37,463	7,347	328	95	20	3	3	50	87	(D)	1477
85	35	28	7	7	33	61	363	-	-	1479
280	115	778	197	35	119	6	70	(Z)	-	1481
2,318	951	1,446	398	160	582	272	3,160	7	(Z)	149
60	30	130	40	17	60	15	224	(Z)	-	1492
129	44	58	20	11	6	17	228	-	-	1493
-	-	181	51	10	-	28	342	-	-	1494
58	10	120	30	69	74	3	63	(Z)	-	1495
41	13	171	48	4	41	59	662	(Z)	-	1496
49	23	39	10	6	6	11	151	(Z)	-	1497
8	4	170	51	18	346	2	91	(Z)	-	1498
1,973	827	577	148	25	49	137	1,399	7	-	1499



**TABLE 4. Fuels and Electric Energy Used, by Geographic**

Code	Geographic area and major industry group	Total energy used  (million kwh. equivalent)	Fuels produced and used at same establishment for power or heat			Purchased fuels		
			Coal  (1,000 short tons)	Crude petroleum  (1,000 barrels)	Natural gas  (million cu. ft.)	Total cost  (\$1,000)	Coal	
							1,000 short tons	Cost  (\$1,000)
	United States, total.....	436,435	791	563	830,978	294,434	1,859	14,524
10	Metal mining.....	31,911	-	-	-	39,448	1,204	10,616
11	Anthracite mining.....	2,692	158	-	-	2,947	26	96
12	Bituminous coal and lignite mining.....	16,071	633	-	-	21,330	73	249
13	Oil and gas extraction.....	329,344	-	563	830,978	135,516	(1)	(1)
14	Nonmetallic minerals mining.....	56,417	-	-	-	95,193	556	3,563
	GEOGRAPHIC AREA							
10 & 14	New England.....	790	-	-	-	2,420	1	4
10 & 14	Maine.....	31	-	-	-	127	-	-
14	New Hampshire.....	39	-	-	-	141	-	-
14	Vermont.....	165	-	-	-	387	1	4
14	Massachusetts.....	353	-	-	-	1,012	-	-
14	Rhode Island.....	27	-	-	-	112	-	-
10 & 14	Connecticut.....	175	-	-	-	641	-	-
	Middle Atlantic.....	13,042	196	-	3,254	22,129	262	2,345
10	Metal mining.....	2,536	-	-	-	3,232	176	1,735
11	Anthracite mining.....	2,692	158	-	-	2,947	26	96
12	Bituminous coal mining.....	2,751	38	-	-	5,933	4	20
13	Oil and gas extraction.....	1,706	-	-	3,254	1,410	-	-
14	Nonmetallic minerals mining.....	3,357	-	-	-	8,607	56	494
	New York.....	3,176	-	-	35	5,659	211	2,060
10	Metal mining.....	1,763	-	-	-	2,416	176	1,735
13	Oil and gas extraction.....	101	-	-	35	300	-	-
14	Nonmetallic minerals mining.....	1,312	-	-	-	2,943	35	325
	New Jersey.....	910	-	-	-	2,247	8	83
10	Metal mining.....	78	-	-	-	75	-	-
14	Nonmetallic minerals mining.....	832	-	-	-	2,172	8	83
	Pennsylvania.....	8,956	196	-	3,219	14,223	43	202
10	Metal mining.....	695	-	-	-	741	-	-
11	Anthracite mining.....	2,692	158	-	-	2,947	26	96
12	Bituminous coal mining.....	2,751	38	-	-	5,933	4	20
13	Oil and gas extraction.....	1,605	-	-	3,219	1,110	-	-
14	Nonmetallic minerals mining.....	1,213	-	-	-	3,492	13	86
	East North Central.....	18,707	120	50	8,224	32,031	507	4,117
10	Metal mining.....	4,597	-	-	-	6,302	310	3,162
12	Bituminous coal mining.....	3,315	120	-	-	5,415	4	11
13	Oil and gas extraction.....	4,763	-	50	8,224	5,983	-	-
14	Nonmetallic minerals mining.....	6,032	-	-	-	14,331	193	944
	Ohio.....	3,753	52	32	615	7,836	64	128
12	Bituminous coal mining.....	1,608	52	-	-	3,444	4	11
13	Oil and gas extraction.....	457	-	32	615	878	-	-
10 & 14	Metal mining and Nonmetallic minerals mining.....	1,688	-	-	-	3,514	60	117
	Indiana.....	1,877	38	6	365	3,819	(Z)	-
12	Bituminous coal mining.....	578	38	-	-	547	-	-
13	Oil and gas extraction.....	636	-	6	365	1,356	-	-
14	Nonmetallic minerals mining.....	663	-	-	-	1,916	(Z)	-
	Illinois.....	5,735	30	4	3,718	8,402	124	747
12	Bituminous coal mining.....	1,129	30	-	-	1,424	-	-
13	Oil and gas extraction.....	2,331	-	4	3,718	2,777	-	-
10 & 14	Metal mining and Nonmetallic minerals mining.....	2,275	-	-	-	4,201	124	747
	Michigan.....	6,681	-	8	3,526	9,382	318	3,233
10	Metal mining.....	4,465	-	-	-	6,132	308	3,150
13	Oil and gas extraction.....	1,338	-	8	3,526	968	-	-
14	Nonmetallic minerals mining.....	878	-	-	-	2,282	10	83
	Wisconsin.....	661	-	-	-	2,592	1	9
10	Metal mining.....	36	-	-	-	34	1	9
14	Nonmetallic minerals mining.....	624	-	-	-	2,558	-	-
	West North Central.....	28,116	7	14	20,508	36,355	652	5,090
10 & 12	Metal mining and Bituminous coal and lignite mining.....	11,265	7	-	-	14,913	650	5,063
13	Oil and gas extraction.....	13,791	-	14	20,508	12,001	-	-
14	Nonmetallic minerals mining.....	3,060	-	-	-	9,441	2	27

See footnotes at end of table.

# Area and Major Industry Group: 1963

Purchased fuels—Continued										Electric energy			Code
Fuel oil				Gas		Gasoline		Cost of other purchased fuels (\$1,000)	Undistributed fuels cost (\$1,000)	Purchased		Generated and used (million kwh.)	
Distillate		Residual		Million cu. ft.	Cost (\$1,000)	1,000 gallons	Cost (\$1,000)			Million kwh.	Cost (\$1,000)		
1,000 barrels	Cost (\$1,000)	1,000 barrels	Cost (\$1,000)										
11,970	59,928	6,123	17,367	253,140	61,022	263,083	68,607	31,135	41,851	22,516	264,878	5,942	
1,842	9,157	2,067	6,236	29,916	8,938	10,244	2,600	1,112	789	5,678	51,395	2,654	10
306	1,485	40	137	2	1	5,534	780	156	292	376	5,771	58	11
1,993	11,004	223	733	982	441	23,612	6,242	1,063	1,598	5,014	56,724	47	12
3,719	18,470	1,216	3,515	133,218	27,253	157,550	42,324	21,645	22,309	6,696	89,754	2,629	13
4,110	19,812	2,577	6,746	89,022	24,389	66,143	16,661	7,159	16,863	4,752	61,234	554	14
158	758	60	166	17	12	2,350	638	158	684	106	1,730	(2)	10 & 14
5	36	(2)	-	-	-	158	46	1	44	4	59	-	10 & 14
7	52	3	12	-	-	104	27	1	49	5	110	-	14
19	96	29	88	-	-	443	121	42	36	38	446	-	14
93	380	27	61	-	-	719	200	52	319	31	584	-	14
1	7	(2)	1	-	-	140	36	6	62	3	49	(2)	14
33	187	1	4	17	12	786	208	56	174	25	482	-	10 & 14
1,559	8,075	522	1,500	2,600	1,153	19,993	4,429	1,282	3,345	2,256	29,663	62	
177	868	212	540	-	-	368	87	2	-	483	4,874	-	10
306	1,485	40	137	2	1	5,534	780	156	292	376	5,771	58	11
554	3,220	82	315	425	189	5,840	1,504	161	524	821	10,378	3	12
34	208	3	2	1,381	473	804	211	115	401	61	967	(2)	13
488	2,294	185	506	792	490	7,447	1,847	848	2,128	515	7,673	1	14
315	1,515	99	257	151	96	2,430	614	176	941	419	4,898	-	
125	632	-	-	-	-	182	47	2	-	193	1,843	-	10
1	3	2	(2)	61	38	193	45	48	166	5	102	-	13
189	880	97	257	90	58	2,055	522	126	775	221	2,953	-	14
130	545	43	114	399	288	1,430	325	512	380	154	2,263	1	
16	65	-	-	-	-	61	10	-	-	47	551	-	10
114	480	43	114	399	288	1,369	315	512	380	107	1,712	1	14
1,114	6,015	380	1,129	2,050	769	16,133	3,490	594	2,024	1,683	22,502	61	
36	171	212	540	-	-	125	30	-	-	243	2,480	-	10
306	1,485	40	137	2	1	5,534	780	156	292	376	5,771	58	11
554	3,220	82	315	425	189	5,840	1,504	161	524	821	10,378	3	12
33	205	1	2	1,320	435	611	166	67	235	56	865	(2)	13
185	934	45	135	303	144	4,023	1,010	210	973	187	3,008	(2)	14
1,716	8,305	922	2,986	2,754	1,117	26,396	6,558	1,939	7,009	2,667	37,439	546	
90	461	771	2,363	194	97	312	83	136	-	539	6,099	463	10
635	3,348	36	140	78	30	6,154	1,571	246	69	883	11,889	22	12
144	698	10	29	766	268	5,137	1,455	749	2,784	603	8,650	8	13
847	3,798	105	454	1,716	722	14,793	3,449	808	4,156	642	10,801	53	14
605	3,098	34	132	837	360	8,848	2,018	517	1,583	433	5,956	4	
395	2,058	23	94	70	27	3,804	999	205	50	239	2,725	1	12
25	226	(2)	1	145	58	900	247	51	295	10	205	(2)	13
185	814	11	37	622	275	4,144	772	261	1,238	184	3,026	3	10 & 14
289	1,040	20	62	128	30	3,083	801	227	1,659	323	4,446	13	
66	355	2	7	-	-	571	148	37	-	139	1,816	10	12
54	102	2	7	119	27	688	185	69	966	105	1,181	1	13
169	583	16	48	9	3	1,824	468	121	693	79	1,449	2	14
453	2,233	59	183	1,406	582	8,475	2,056	643	1,958	1,147	17,263	65	
174	935	11	39	8	3	1,779	424	4	19	505	7,348	11	12
51	287	8	21	465	173	2,590	730	478	1,088	461	6,791	7	13
228	1,011	40	123	933	406	4,106	902	161	851	181	3,124	47	10 & 14
235	1,200	785	2,401	382	145	2,876	831	375	1,197	689	8,524	464	
83	421	771	2,363	8	3	285	75	120	-	497	5,493	463	10
14	83	-	-	37	10	959	293	151	431	27	473	(2)	13
138	696	14	38	337	132	1,632	463	104	766	165	2,558	1	14
134	734	24	208	1	-	3,114	852	177	612	75	1,250	(2)	
3	20	-	-	-	-	11	3	2	-	23	368	-	10
131	714	24	208	1	-	3,103	849	175	612	52	882	(2)	14
1,368	6,930	994	2,942	27,882	8,490	23,455	6,150	2,382	4,371	1,481	20,994	1,636	
646	3,214	779	2,432	8,929	3,232	2,805	684	119	169	759	9,739	1,572	10 & 12
241	1,292	139	322	16,909	4,693	9,203	2,632	1,591	1,471	508	7,739	48	13
481	2,424	76	188	2,044	565	11,447	2,834	672	2,731	214	3,516	16	14

**TABLE 4. Fuels and Electric Energy Used, by Geographic**

Code	Geographic area and major industry group	Total energy used  (million kwh. equivalent)	Fuels produced and used at same establishment for power or heat			Purchased fuels		
			Coal  (1,000 short tons)	Crude petroleum  (1,000 barrels)	Natural gas  (million cu. ft.)	Total cost  (\$1,000)	Coal	
							1,000 short tons	Cost  (\$1,000)
	West North Central—Continued							
	Minnesota.....	10,906	-	-	-	15,321	635	4,988
10	Metal mining.....	10,496	-	-	-	13,876	635	4,988
14	Nonmetallic minerals mining.....	410	-	-	-	1,445	(2)	-
	Iowa.....	636	1	-	-	2,312	1	10
14	Nonmetallic minerals mining.....	564	-	-	-	2,095	1	10
	Missouri.....	1,286	(2)	-	-	3,031	2	17
10 &	Metal mining and Bituminous coal							
12	mining.....	312	-	-	-	358	1	4
14	Nonmetallic minerals mining.....	971	-	-	-	2,652	1	13
	North Dakota.....	1,856	6	-	4,680	1,034	-	-
13	Oil and gas extraction.....	1,687	-	-	4,680	594	-	-
	South Dakota.....	495	-	-	-	870	14	72
	Nebraska.....	1,614	-	2	2,259	1,953	(2)	3
13	Oil and gas extraction.....	1,374	-	2	2,259	1,041	-	-
	Kansas.....	11,323	-	12	13,569	11,834	-	-
13	Oil and gas extraction.....	10,722	-	12	13,569	10,320	-	-
14	Nonmetallic minerals mining.....	545	-	-	-	1,405	-	-
	South Atlantic.....	19,637	376	-	5,409	23,706	197	1,306
10	Metal mining.....	302	-	-	-	413	(2)	2
12	Bituminous coal mining.....	6,249	376	-	-	4,510	61	194
13	Oil and gas extraction.....	2,779	-	-	5,409	1,961	-	-
14	Nonmetallic minerals mining.....	10,307	-	-	-	16,822	136	1,110
	Delaware and Maryland.....	465	(2)	-	13	1,280	5	61
12	Bituminous coal mining.....	54	(2)	-	-	197	-	-
14	Nonmetallic minerals mining.....	402	-	-	-	1,074	5	61
	Virginia.....	3,647	238	-	-	3,461	56	438
10	Metal mining.....	58	-	-	-	46	(2)	2
12	Bituminous coal mining.....	2,279	238	-	-	695	-	-
14	Nonmetallic minerals mining.....	1,306	-	-	-	2,711	56	436
	West Virginia.....	6,818	138	-	5,396	5,809	72	288
12	Bituminous coal mining.....	3,916	138	-	-	3,618	61	194
13	Oil and gas extraction.....	2,616	-	-	5,396	1,529	-	-
14	Nonmetallic minerals mining.....	286	-	-	-	662	11	94
	North Carolina.....	880	-	-	-	1,542	40	303
	South Carolina.....	483	-	-	-	985	2	20
	Georgia.....	3,212	-	-	-	4,850	6	46
14	Nonmetallic minerals mining.....	3,173	-	-	-	4,711	6	46
	Florida.....	4,132	-	-	-	5,779	16	150
14	Nonmetallic minerals mining.....	3,785	-	-	-	5,156	16	150
	East South Central.....	13,911	67	4	14,429	16,414	163	957
10	Metal mining.....	318	-	-	-	602	1	4
12	Bituminous coal mining.....	2,857	67	-	-	3,859	3	20
13	Oil and gas extraction.....	6,930	-	4	14,429	5,022	-	-
14	Nonmetallic minerals mining.....	3,806	-	-	-	6,931	159	933
	Kentucky.....	4,614	65	4	4,170	5,385	7	45
12	Bituminous coal mining.....	2,206	65	-	-	2,389	2	16
13	Oil and gas extraction.....	1,631	-	4	4,170	1,020	-	-
14	Nonmetallic minerals mining.....	777	-	-	-	1,976	5	29
	Tennessee.....	2,606	-	-	-	3,898	154	898
10	Metal mining.....	106	-	-	-	69	1	4
12	Bituminous coal mining.....	228	-	-	-	600	(2)	-
14	Nonmetallic minerals mining.....	2,271	-	-	-	3,224	153	894
	Alabama.....	1,457	2	-	457	3,008	2	14
10	Metal mining.....	212	-	-	-	533	-	-
12	Bituminous coal mining.....	423	2	-	-	870	1	4
13	Oil and gas extraction.....	411	-	-	457	607	-	-
14	Nonmetallic minerals mining.....	411	-	-	-	998	1	10

See footnotes at end of table.

# Area and Major Industry Group: 1963—Continued

Purchased fuels—Continued										Electric energy			Code
Fuel oil				Gas		Gasoline		Cost of other purchased fuels (\$1,000)	Undistributed fuels cost (\$1,000)	Purchased		Generated and used (million kwh.)	
Distillate		Residual		Million cu. ft.	Cost (\$1,000)	1,000 gallons	Cost (\$1,000)			Million kwh.	Cost (\$1,000)		
1,000 barrels	Cost (\$1,000)	1,000 barrels	Cost (\$1,000)										
616	3,116	785	2,438	8,836	3,182	3,700	846	127	624	496	6,971	1,544	10 14
552	2,781	767	2,397	8,797	3,168	1,836	454	64	24	470	6,501	1,544	
64	335	18	41	39	14	1,864	392	.63	600	26	470	(Z)	
147	762	17	42	53	10	3,012	810	147	531	47	780	3	14
125	643	13	34	53	10	2,768	747	145	506	44	717	3	
194	961	33	78	896	266	3,301	824	177	708	268	3,284	10	
31	159	3	12	63	30	356	74	19	60	189	2,014	-	10 & 12 14
162	790	30	66	833	236	2,928	745	158	644	79	1,268	10	
34	177	9	35	409	58	1,541	423	182	159	31	622	1	
14	104	3	15	399	55	645	195	165	60	17	314	1	13
51	274	7	19	452	150	759	201	49	105	83	908	28	13
46	215	17	42	1,441	276	1,827	461	262	694	63	1,059	1	
19	78	17	41	1,441	276	771	231	219	196	40	680	1	
280	1,425	126	288	15,795	4,548	9,315	2,585	1,438	1,550	493	7,370	49	13 14
206	1,087	119	266	15,069	4,362	7,770	2,201	1,193	1,211	451	6,716	46	
60	287	7	21	726	186	1,410	356	245	310	21	364	3	
1,431	6,751	1,087	2,675	13,324	4,653	16,393	4,290	1,906	2,125	3,451	38,951	14	10 12 13 14
18	72	60	158	34	10	142	35	22	114	113	1,208	-	
353	1,972	59	159	324	161	5,665	1,513	211	300	1,752	20,516	6	
39	190	7	20	2,599	807	1,295	349	240	355	44	484	2	12
1,021	4,517	961	2,338	10,367	3,675	9,291	2,393	1,433	1,356	1,542	16,743	6	14
60	290	52	117	27	8	1,068	277	252	275	49	929	-	12 14
15	74	-	-	-	-	250	61	11	51	4	67	-	
43	212	52	117	24	7	811	214	241	222	45	852	-	
194	945	56	130	650	221	2,546	644	711	372	400	5,197	1	10 12 14
6	31	-	-	28	8	22	4	1	-	38	387	-	
68	342	13	28	-	-	672	193	51	81	254	3,213	-	
120	572	43	102	622	213	1,849	446	659	283	105	1,595	1	14
353	1,998	58	158	2,480	593	6,233	1,663	390	719	1,577	18,282	11	12 13 14
270	1,556	46	131	324	161	4,743	1,259	149	168	1,494	17,236	6	
38	185	1	2	2,150	430	1,245	334	240	338	41	473	2	
45	257	11	25	6	2	245	70	1	213	42	573	3	14
130	618	3	9	523	71	1,181	337	94	110	92	1,182	(Z)	14
41	208	37	91	629	231	1,367	336	44	55	62	714	(Z)	
182	903	204	546	6,418	2,365	1,640	397	321	272	299	3,029	2	
180	901	201	531	6,418	2,365	1,634	395	300	173	298	3,011	2	14
471	1,789	677	1,624	2,597	1,164	2,358	636	94	322	972	9,618	(Z)	14
464	1,755	614	1,463	2,148	787	2,204	595	94	312	899	8,830	-	
788	4,166	180	486	7,247	2,023	15,212	3,973	1,727	3,082	2,068	18,534	19	
55	282	-	-	104	54	555	157	12	93	139	1,157	-	10
297	1,661	30	79	135	54	4,101	1,149	403	493	1,349	10,475	1	12
148	657	36	114	4,169	1,210	4,355	988	757	1,296	223	3,087	17	13
288	1,566	114	293	2,839	705	6,201	1,679	555	1,200	357	3,815	1	14
295	1,558	70	195	961	283	6,558	1,773	361	1,170	1,232	10,381	11	12 13 14
194	1,043	27	70	54	27	2,862	769	148	316	1,078	7,986	(Z)	
12	82	2	4	174	65	1,119	318	95	456	88	1,339	10	
89	433	41	121	733	191	2,577	686	118	398	66	1,056	1	14
186	1,113	33	99	1,268	329	2,482	671	323	465	373	2,787	1	10 12 14
10	57	-	-	7	4	16	4	-	-	79	505	-	
40	223	3	9	-	-	347	105	139	124	77	460	1	
136	833	30	90	1,261	325	2,119	562	184	336	217	1,821	(Z)	14
167	914	37	65	676	267	2,298	677	389	682	380	4,166	(Z)	10 12 13 14
45	225	-	-	97	50	539	153	12	93	60	652	-	
63	395	-	-	81	27	892	275	116	53	194	2,029	-	
25	136	10	25	214	119	131	38	45	244	68	764	(Z)	13
34	158	27	40	284	71	736	211	216	292	58	721	-	14

**TABLE 4. Fuels and Electric Energy Used, by Geographic**

Code	Geographic area and major industry group	Total energy used  (million kwh. equivalent)	Fuels produced and used at same establishment for power or heat			Purchased fuels		
			Coal	Crude petroleum	Natural gas	Total cost  (\$1,000)	Coal	
							1,000 short tons	Cost  (\$1,000)
	East South Central—Continued							
13	Mississippi.....	5,234	-	-	9,802	4,123	-	-
14	Oil and gas extraction.....	4,887	-	-	9,802	3,390	-	-
	Nonmetallic minerals mining.....	347	-	-	-	733	-	-
10 &	West South Central.....	253,160	-	156	606,431	107,452	(Z)	1
12	Metal mining and Bituminous coal and lignite mining.....	1,092	-	-	-	866	(Z)	1
13	Oil and gas extraction.....	236,368	-	156	606,431	92,021	-	-
14	Nonmetallic minerals mining.....	15,700	-	-	-	14,565	(Z)	-
10 &	Arkansas.....	3,805	-	-	4,686	3,453	(Z)	-
12	Metal mining and Bituminous coal and lignite mining.....	219	-	-	-	308	-	-
13	Oil and gas extraction.....	2,898	-	-	4,686	1,985	-	-
14	Nonmetallic minerals mining.....	688	-	-	-	1,160	(Z)	-
13	Louisiana.....	61,798	-	57	141,851	31,630	-	-
14	Oil and gas extraction.....	56,691	-	57	141,851	27,087	-	-
	Nonmetallic minerals mining.....	5,107	-	-	-	4,543	-	-
13	Oklahoma.....	28,822	-	1	68,639	12,893	(Z)	1
10 &	Oil and gas extraction.....	28,214	-	1	68,639	11,666	-	-
14	Metal mining and Nonmetallic minerals mining.....	557	-	-	-	1,055	(Z)	1
10&12	Texas.....	158,735	-	98	391,255	59,476	(Z)	-
13	Metal mining and Lignite mining....	782	-	-	-	357	-	-
14	Oil and gas extraction.....	148,565	-	98	391,255	51,283	-	-
	Nonmetallic minerals mining.....	9,388	-	-	-	7,836	-	-
10	Mountain.....	50,544	19	90	85,622	31,320	28	213
12	Metal mining.....	11,286	-	-	-	12,426	18	158
13	Bituminous coal and lignite mining....	402	19	-	-	500	1	4
14	Oil and gas extraction.....	32,596	-	90	85,622	10,521	-	-
	Nonmetallic minerals mining.....	6,250	-	-	-	7,873	9	51
10	Montana.....	2,909	(Z)	1	3,846	2,169	1	2
13	Metal mining.....	1,087	-	-	-	550	(Z)	1
	Oil and gas extraction.....	1,643	-	1	3,846	1,260	-	-
10	Idaho.....	475	-	-	-	691	10	74
14	Metal mining.....	252	-	-	-	227	4	40
	Nonmetallic minerals mining.....	223	-	-	-	464	6	34
10	Wyoming.....	10,134	2	79	18,895	6,506	(Z)	1
12	Metal mining.....	913	-	-	-	1,273	(Z)	1
13	Bituminous coal mining.....	79	2	-	-	193	-	-
14	Oil and gas extraction.....	7,773	-	79	18,895	3,560	-	-
	Nonmetallic minerals mining.....	1,369	-	-	-	1,480	-	-
10	Colorado.....	5,457	7	1	10,772	3,383	1	16
12	Metal mining.....	1,302	-	-	-	1,429	1	14
13	Bituminous coal mining.....	99	7	-	-	83	(Z)	2
14	Oil and gas extraction.....	3,758	-	1	10,772	1,025	-	-
	Nonmetallic minerals mining.....	298	-	-	-	846	(Z)	-
10 &	New Mexico.....	22,840	-	6	45,812	8,658	3	16
12	Metal mining and Bituminous coal mining.....	2,281	-	-	-	2,105	(Z)	1
13	Oil and gas extraction.....	17,197	-	6	45,812	4,079	-	-
14	Nonmetallic minerals mining.....	3,362	-	-	-	2,474	3	15
10	Arizona.....	3,938	-	-	4	5,242	(Z)	7
14	Metal mining.....	3,710	-	-	-	4,749	(Z)	7
	Nonmetallic minerals mining.....	223	-	-	-	474	-	-
12	Utah.....	3,823	10	-	6,293	2,283	9	65
13	Bituminous coal mining.....	177	10	-	-	119	1	2
10 &	Oil and gas extraction.....	2,206	-	-	6,293	540	-	-
14	Metal mining and Nonmetallic minerals mining.....	1,438	-	-	-	1,624	8	63
10	Nevada.....	968	-	3	-	2,388	3	32
14	Metal mining.....	569	-	-	-	1,195	3	32
	Nonmetallic minerals mining.....	384	-	-	-	1,153	-	-

See footnotes at end of table.

# Area and Major Industry Group: 1963—Continued

Purchased fuels—Continued										Electric energy			Code	
Fuel oil				Gas		Gasoline		Cost of other purchased fuels	Undistributed fuels cost	Purchased		Generated and used		
Distillate		Residual		Million cu. ft.	Cost	1,000 gallons	Cost			Million kwh.	Cost			Generated and used
1,000 barrels	Cost (\$1,000)	1,000 barrels	Cost (\$1,000)											
140	581	40	127	4,342	1,144	3,874	852	654	765	83	1,200	7		
111	439	24	85	3,781	1,026	3,105	632	617	591	67	983	7	13	
29	142	16	42	561	118	769	220	37	174	16	217	(Z)	14	
2,850	14,008	919	2,891	142,375	26,668	122,878	32,561	15,717	15,606	3,839	50,839	2,332		
31	170	4	11	2,773	326	823	209	75	74	110	967	-	10 & 12	
2,589	12,654	872	2,666	93,780	17,225	115,617	30,676	14,766	14,034	3,413	45,568	2,224	13	
230	1,184	43	214	45,822	9,117	6,438	1,676	876	1,498	316	4,304	108	14	
60	311	13	35	5,763	1,446	2,376	683	300	678	139	1,973	4		
12	66	-	-	531	119	353	71	27	25	11	181	-	10 & 12	
11	50	9	25	3,778	1,006	755	236	187	481	67	955	3	13	
37	195	4	10	1,454	321	1,268	376	86	172	61	837	1	14	
1,841	8,787	528	1,785	36,991	8,380	25,463	7,296	2,822	2,560	321	4,461	522		
1,799	8,515	522	1,763	21,433	4,927	24,531	7,032	2,659	2,191	247	3,467	458	13	
42	272	6	22	15,558	3,453	932	264	163	369	74	994	64	14	
186	993	24	71	15,799	2,836	11,820	3,457	2,879	2,656	701	9,442	122		
139	740	21	62	14,852	2,617	10,987	3,226	2,679	2,342	626	8,396	121	13	
36	194	3	9	947	219	619	160	200	272	60	858	1	10 & 14	
763	3,917	354	1,000	83,822	14,006	83,219	21,125	9,716	9,712	2,678	34,963	1,684		
7	39	4	11	2,167	201	208	58	44	4	72	349	-	10&12	
640	3,349	320	816	53,717	8,675	79,344	20,182	9,241	9,020	2,473	32,750	1,642	13	
116	529	30	173	27,938	5,130	3,667	885	431	688	133	1,864	42	14	
1,343	6,870	485	1,405	42,740	10,149	21,642	6,097	3,586	3,000	4,956	46,626	962		
797	3,909	180	534	17,882	5,218	5,845	1,506	721	380	3,472	27,217	603	10	
44	233	8	21	10	4	634	177	20	41	114	1,895	(Z)	12	
210	1,129	104	265	10,738	1,753	12,383	3,645	2,336	1,393	885	11,907	178	13	
292	1,599	193	585	14,110	3,174	2,780	769	509	1,186	485	5,607	181	14	
69	349	41	107	2,063	575	1,313	381	425	330	657	3,548	2		
1	9	-	-	1,692	514	59	13	2	11	557	2,326	-	10	
49	246	1	4	371	61	1,099	335	406	208	68	885	2	13	
40	235	33	121	197	62	383	105	20	74	172	1,206	1		
7	44	7	30	87	39	168	47	-	27	156	1,073	1	10	
33	191	26	91	110	23	215	58	20	47	16	133	(Z)	14	
260	1,290	140	379	7,459	1,990	5,334	1,510	835	501	644	7,867	120		
126	599	2	10	1,498	474	545	133	25	31	193	2,068	(Z)	10	
21	110	-	-	4	1	289	71	7	4	13	201	-	12	
90	453	76	188	2,281	524	4,255	1,245	787	363	393	5,084	40	13	
23	128	62	181	3,676	991	245	61	16	103	45	514	80	14	
101	565	37	101	3,507	1,087	2,851	851	272	491	470	5,487	18		
41	220	14	37	2,649	882	600	172	33	71	334	3,236	4	10	
5	35	2	3	3	1	73	34	3	5	29	602	(Z)	12	
11	70	3	9	635	136	1,589	478	134	198	84	1,220	13	13	
44	240	18	52	220	68	589	167	102	217	23	429	1	14	
155	793	3	6	22,960	4,308	5,714	1,648	991	896	709	8,696	414		
84	382	1	-	6,116	1,411	732	193	68	50	199	2,445	196	10 & 12	
48	288	1	4	7,308	1,000	4,615	1,364	873	550	244	3,544	118	13	
23	123	1	2	9,536	1,897	367	91	50	296	266	2,707	100	14	
395	1,865	27	72	5,336	1,766	2,900	741	639	152	1,273	11,329	399		
389	1,824	20	54	4,974	1,672	2,691	679	474	39	1,255	11,007	399	10	
6	41	7	18	362	94	192	58	164	99	18	321	(Z)	14	
94	489	123	321	1,125	312	1,973	526	224	346	797	6,053	8		
7	34	6	18	-	-	165	43	3	19	61	864	-	12	
12	72	21	54	143	32	778	209	113	60	96	1,173	5	13	
75	383	96	249	982	280	1,030	274	108	267	640	4,016	3	10 & 14	
229	1,284	81	298	93	49	1,174	335	180	210	234	2,440	(Z)		
120	672	41	157	-	-	484	134	81	119	199	1,946	(Z)	10	
109	612	38	135	93	49	660	191	77	89	35	494	-	14	

TABLE 4. Fuels and Electric Energy Used, by Geographic

Code	Geographic area and major industry group	Total energy used  (million kwh. equivalent)	Fuels produced and used at same establishment for power or heat			Purchased fuels		
			Coal  (1,000 short tons)	Crude petroleum  (1,000 barrels)	Natural gas  (million cu. ft.)	Total cost  (\$1,000)	Coal	
							1,000 short tons	Cost  (\$1,000)
	Pacific.....	38,528	6	249	87,101	22,607	49	491
10	Metal mining.....	911	-	-	-	1,593	49	491
12	Bituminous coal and lignite mining.....	101	6	-	-	214	(Z)	-
13	Oil and gas extraction.....	30,411	-	249	87,101	6,597	-	-
14	Nonmetallic minerals mining.....	7,105	-	-	-	14,203	-	-
	Washington.....	366	2	-	-	1,041	1	16
14	Nonmetallic minerals mining.....	243	-	-	-	816	-	-
	Oregon.....	414	-	-	-	1,291	-	-
14	Nonmetallic minerals mining.....	389	-	-	-	1,197	-	-
	California.....	37,061	-	249	87,091	18,796	-	-
10&12	Metal mining and Lignite mining....	374	-	-	-	696	-	-
13	Oil and gas extraction.....	30,264	-	249	87,091	6,090	-	-
14	Nonmetallic minerals mining.....	6,423	-	-	-	12,010	-	-
	Alaska.....	644	4	-	10	1,329	48	475
10	Metal mining.....	432	-	-	-	658	48	475
12	Bituminous coal mining.....	78	4	-	-	201	(Z)	-
13	Oil and gas extraction.....	127	-	-	10	440	-	-
	Hawaii.....	43	-	-	-	150	-	-
14	Nonmetallic minerals mining.....	43	-	-	-	150	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. (Z) Less than one-half of the unit of measure specified.

<sup>1</sup>The cost of coal is included with the cost of other purchased fuels.

## Area and Major Industry Group: 1963—Continued

Purchased fuels—Continued										Electric energy			Code	
Fuel oil				Gas		Gasoline		Cost of other purchased fuels	Undistributed fuels cost	Purchased		Generated and used		
Distillate		Residual		Million cu. ft.	Cost	1,000 gallons	Cost			Million kwh.	Cost			Generated and used
1,000 barrels	Cost (\$1,000)	1,000 barrels	Cost (\$1,000)											
757	4,065	954	2,316	14,201	6,757	14,764	3,911	2,438	2,629	1,692	20,102	371	10	
117	599	69	217	10	4	515	138	37	107	151	1,568	16		
21	152	-	-	-	-	97	29	10	23	7	137	15		
314	1,642	45	97	2,876	824	8,756	2,368	1,091	575	959	11,352	152		
305	1,672	840	2,002	11,315	5,929	5,396	1,376	1,300	1,924	575	7,045	188		
64	329	16	57	78	32	1,104	292	125	190	64	678	17	14	
48	240	4	13	73	30	941	254	120	159	30	364	3		
45	229	43	123	200	115	1,000	254	183	387	22	326	10	14	
40	206	43	123	200	115	966	243	183	327	21	316	10		
533	2,807	892	2,131	13,923	6,610	12,080	3,213	2,095	1,940	1,583	18,717	323	10&12	
72	348	59	177	5	2	284	79	32	58	109	1,179	(2)		
248	1,252	42	92	2,876	824	8,485	2,306	1,091	525	956	11,289	148		
213	1,207	791	1,862	11,042	5,784	3,311	828	972	1,357	518	6,249	175		
111	681	1	1	-	-	427	110	12	50	18	277	21	10	
26	149	-	-	-	-	83	23	-	11	12	150	2		
21	149	-	-	-	-	73	23	10	19	2	57	15		
64	383	1	1	-	-	246	55	-	1	3	58	4		
4	19	2	4	-	-	153	42	23	62	5	104	(2)	14	
4	19	2	4	-	-	153	42	23	62	5	104	(2)		



TABLE 5. Purchased Supplies Used, by Industry Group, 1963 and 1958, and by Selected Industries. 1963

Ind. code	Industry group and industry	Purchased supplies used <sup>1</sup>						Undistributed supplies cost <sup>5</sup>
		Total delivered cost	Explosives <sup>2</sup>		Steel mill shapes and forms <sup>3</sup>		All other supplies (delivered cost) <sup>4</sup>	
			Quantity (1,000 pounds)	Delivered cost (\$1,000)	Quantity (short tons)	Delivered cost (\$1,000)		
	All mineral industries:							
	1963.....	2,608,742	6466,358	644,263	62,082,490	6491,588	1,354,567	718,324
	1958.....	2,320,093	6367,920	646,982	6569,654	678,046	6457,356	1,737,709
10	Metal mining:							
	1963.....	321,994	175,409	20,463	287,450	53,212	237,472	10,847
	1958.....	282,120	136,743	18,733	130,509	26,207	223,827	13,353
1011	Iron ores.....	7120,388	89,185	9,945	87,058	21,416	787,253	1,774
1021	Copper ores.....	108,493	61,711	5,256	169,986	19,869	83,351	17
1031	Lead and zinc ores.....	22,677	9,660	1,749	11,445	3,045	16,444	1,439
	Lead ores subindustry.....	815,886	2,453	470	5,235	1,446	813,442	295
	Zinc ores subindustry.....	833,075	7,207	1,279	6,210	1,599	828,148	1,144
104	Gold and silver ores.....	811,325	3,024	616	6,995	1,716	88,006	987
1042	Lode gold.....	5,366	1,432	308	4,242	988	3,702	368
1043	Placer gold.....	85,959	1,592	308	2,753	728	84,304	619
1044	Silver ores.....							
1051	Bauxite.....	660	(D)	(D)	(D)	(D)	529	24
106	Ferroalloy ores.....	817,935	(D)	(D)	(D)	(D)	814,204	121
1062	Manganese ores.....	7398	(D)	(D)	(D)	(D)	7290	87
1064	Tungsten ores and	817,537	-	(D)	-	(D)	813,914	34
1069	ferroalloy ores, n.e.c.....							
1081	Metal mining services.....	75,209	(NA)	(NA)	(NA)	(NA)	(NA)	75,209
109	Miscellaneous metal ores.....	747,308	11,829	1,854	11,966	4,492	739,686	1,276
1092	Mercury ores.....	791	(D)	(D)	(D)	(D)	(D)	(D)
1093	Titanium ores.....	3,761	(D)	(D)	(D)	(D)	(D)	(D)
1094	Uranium-radium-vanadium ores.....	741,747	(D)	(D)	(D)	(D)	(D)	(D)
1099	Metallic ores, n.e.c.....	71,009	(D)	(D)	(D)	(D)	(D)	(D)
11	Anthracite mining:							
	1963.....	26,773	36,100	2,334	6,285	1,006	915,988	7,445
	1958.....	25,556	11,880	2,095	11,171	1,902	98,923	12,636
1111	Anthracite.....	23,091	36,100	2,334	6,285	1,006	915,988	3,763
1112	Anthracite mining services.....	3,682	(NA)	(NA)	(NA)	(NA)	(NA)	3,682
12	Bituminous coal and lignite mining:							
	1963.....	369,986	249,379	21,466	227,069	46,947	9249,024	52,549
	1958.....	354,363	219,297	26,154	427,924	49,937	9224,606	53,666
1211	Bituminous coal.....	10365,480	249,076	21,400	226,870	46,848	11249,019	47,954
1212	Lignite.....	(10)	303	66	199	99	115	89
1213	Bituminous coal and lignite mining services.....	4,506	(NA)	(NA)	(NA)	(NA)	(NA)	4,506
13	Oil and gas extraction:							
	1963.....	1,510,603	(NA)	(NA)	1,536,391	390,423	12852,083	268,097
	1958.....	1,358,530	(NA)	(NA)	(NA)	(NA)	(NA)	1,358,530
1311	Crude petroleum and natural gas.....	1,036,315	(NA)	(NA)	1,431,360	362,042	12526,573	147,700
	Crude petroleum subindustry.....	903,024	(NA)	(NA)	1,262,297	318,831	452,755	131,438
	Natural gas subindustry.....	133,291	(NA)	(NA)	169,063	43,211	73,818	16,262
1321	Natural gas liquids.....	88,375	(X)	(X)	21,751	4,849	83,526	-
138	Oil and gas field services.....	385,913	(NA)	(NA)	83,280	23,532	12241,984	120,397
1381	Drilling oil and gas wells.....	229,469	(NA)	(NA)	75,474	20,801	158,379	50,289
1382	Oil and gas exploration services.....	15,482	(NA)	(NA)	979	866	8,934	5,682
1389	Oil and gas field services, n.e.c.....	140,962	(NA)	(NA)	6,827	1,865	74,671	64,426
14	Nonmetallic minerals mining:							
	1963.....	379,386	(NA)	(NA)	(NA)	(NA)	(NA)	379,386
	1958.....	299,524	(NA)	(NA)	(NA)	(NA)	(NA)	299,524

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Except as indicated by footnote 7, excludes the cost of products purchased for resale without further processing. (This cost is included with supplies in many of the 1963 and 1958 tables.)

<sup>2</sup>Excludes the cost of blasting accessories and breaking agents.

<sup>3</sup>Includes such items as rails, wheels, track accessories, plates, pipe, casing, tubing, piling, drill steel bars, other bars, roof bolts, sheets, strip, wire, wire products, and structural shapes.

<sup>4</sup>Represents such items as drill bits, cement, parts for renewals and repairs, lubricants, round and hewn woods products and stumpage, lumber, and water purchased.

# Power Equipment in Mineral Industries

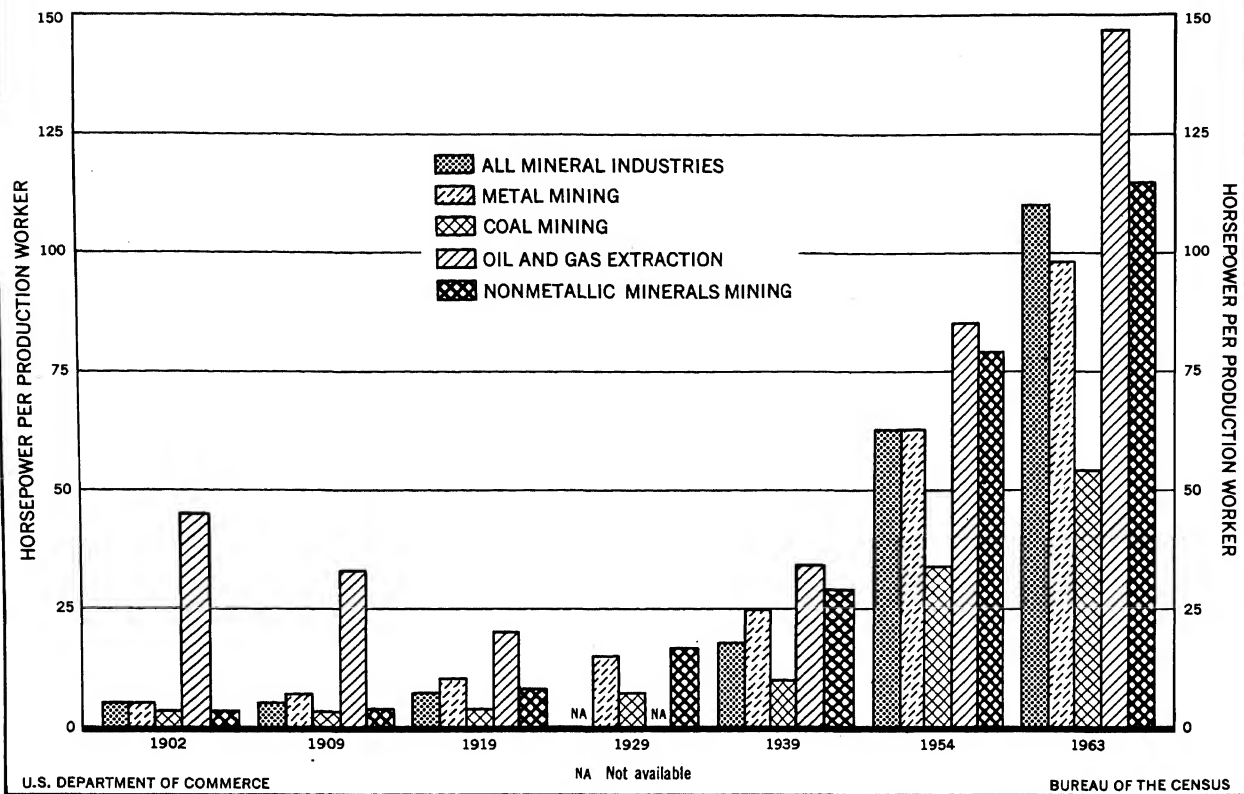
## Chapter 7

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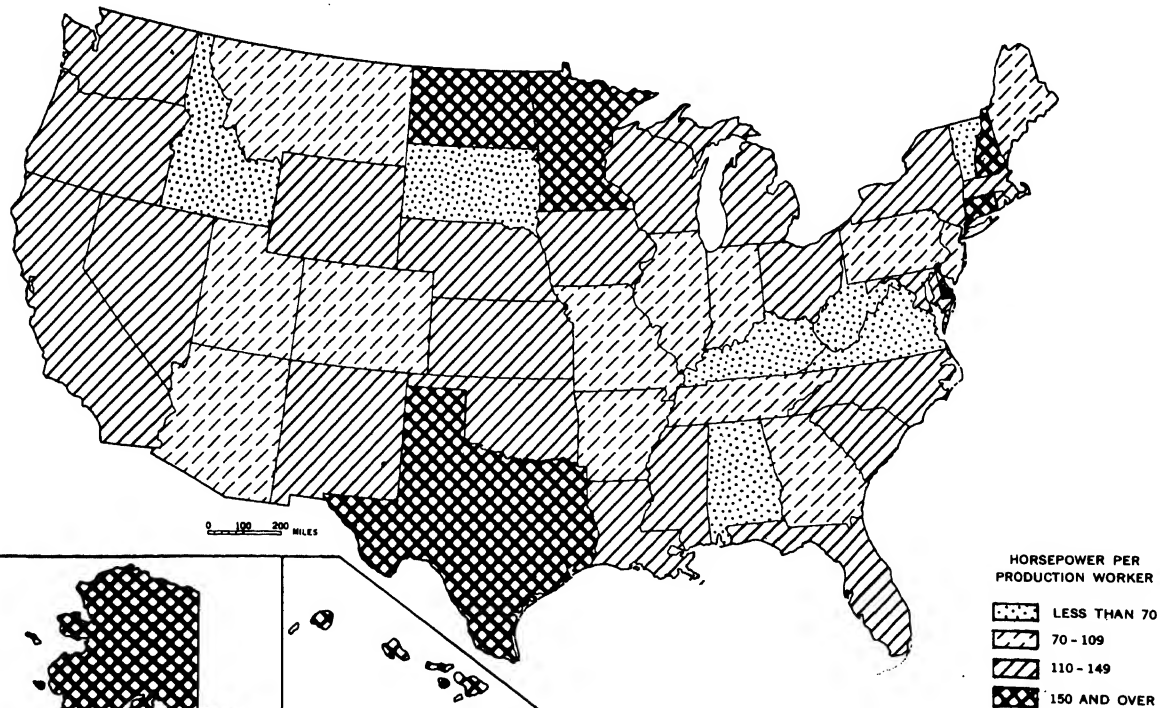
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# HORSEPOWER PER PRODUCTION WORKER IN MINING FOR MAJOR INDUSTRY GROUPS: 1902-1963



## HORSEPOWER PER PRODUCTION WORKER IN MINING, BY STATES: 1963



# Power of Power Equipment Used, 1963 and Earlier Years; and by Major Industry Group: 1963, 1954, and 1939

Year and year	Aggregate horsepower per production worker	Aggregate horsepower (prime movers and electric motors driven by purchased energy)  (1,000)	Prime movers (1,000 horsepower)			Electric motors (1,000 horsepower)		
			Total	Driving generators <sup>1</sup>	Not driving generators <sup>1</sup>	Total	Driven by purchased energy	Driven by energy generated and used at same establishment
INDUSTRIES <sup>2</sup>								
gas extraction:								
.....	110	52,772	39,439	3,308	36,131	14,941	13,333	1,608
.....	63	40,877	30,709	2,377	28,332	11,802	10,168	1,634
.....	18	14,160	8,149	1,344	6,805	7,649	6,011	1,638
.....	7	6,816	5,177	(NA)	(NA)	2,919	1,639	1,280
.....	5	4,722	4,506	(NA)	(NA)	724	216	508
.....	5	2,753	2,727	(NA)	(NA)	139	26	113
gas extraction:								
.....	84	24,463	14,302	2,027	12,275	11,139	10,160	979
.....	50	20,773	11,902	1,629	10,273	10,105	8,871	1,234
.....	14	9,059	3,512	1,188	2,324	7,067	5,547	1,520
.....	9	7,584	2,780	994	1,786	6,161	4,804	1,357
.....1963..	98	6,115	3,420	1,106	2,314	3,371	2,695	676
.....1954..	63	5,236	2,946	911	2,035	3,030	2,290	740
.....1939 <sup>3</sup> .	25	2,264	866	370	496	1,697	1,398	299
.....1963..	68	704	362	71	291	384	342	42
.....1954..	46	1,506	703	116	587	906	803	103
.....1939..	13	1,091	509	165	344	950	582	368
lignite								
.....1963..	53	6,301	2,574	239	2,335	3,781	3,727	54
.....1954..	32	6,347	2,670	312	2,358	3,802	3,677	125
.....1939 <sup>3</sup> .	9	3,373	922	454	468	3,073	2,451	622
ion.....1963..	147	28,309	25,137	1,281	23,856	3,802	3,172	630
.....1954..	85	20,104	18,807	750	18,057	1,697	1,297	400
.....1939 <sup>3</sup> .	34	5,101	4,637	156	4,481	582	464	118
s mining.....1963..	115	11,343	7,946	611	7,335	3,603	3,397	206
.....1954..	79	7,684	5,583	288	5,295	2,367	2,101	266
.....1939 <sup>3</sup> .	29	2,331	1,215	199	1,016	1,347	1,116	231

represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available.

tract service operations were allocated between "driving generators" and "not driving generators" in proportion to such

excludes, but for 1939 includes, data for dimension and crushed stone, clay, and gypsum mines operated as parts of  
ents. For 1929 and earlier years, excludes data for common clay and shale and contract service operations. For 1919, 1909,  
for sand and gravel operations. For 1902, includes data for lime plants.  
aska and Hawaii.

TABLE 2. Horsepower of Power Equipment Used,

Ind. code	Industry	Aggregate horsepower per production worker		Aggregate horsepower (prime movers and electric motors driven by purchased energy)				
				Total	Loading equipment	Transportation equipment		All other equipment
		1963	1954			Highway-type	Other	
		(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
	United States, total.....	110	63	52,772	4,516	16,517	4,913	26,826
	MAJOR INDUSTRY GROUPS							
10	Metal mining.....	98	63	6,115	557	850	1,696	3,012
11	Anthracite mining.....	68	46	704	143	136	99	326
12	Bituminous coal and lignite mining.....	53	32	6,301	1,399	915	1,536	2,451
13	Oil and gas extraction.....	147	85	28,309	(X)	11,385	(X)	16,924
14	Nonmetallic minerals mining.....	115	79	11,343	2,417	3,231	1,582	4,113
	INDUSTRIES							
10	Metal mining.....	98	63	6,115	557	850	1,696	3,012
1011	Iron ores.....	145	64	2,646	277	266	784	1,319
1021	Copper ores.....	88	72	1,886	104	200	675	907
1031	Lead and zinc ores.....	56	55	435	32	45	87	271
	Lead ores subindustry.....	61	59	207	9	20	50	128
	Zinc ores subindustry.....	52	51	228	23	25	37	143
104	Gold and silver ores.....	67	50	240	21	37	40	142
1042	Lode gold.....	40	42	83	5	12	16	50
1043	Placer gold.....	308	128	100	14	9	13	64
1044	Silver ores.....	49	34	57	2	16	11	28
1051	Bauxite.....	70	74	29	3	16	3	7
106	Ferroalloy ores.....	60	54	157	12	24	10	111
1062	Manganese ores.....	111	47	20	3	3	2	12
1064	Tungsten ores.....	56	59	137	9	21	8	99
1069	Ferroalloy ores, n.e.c.....		55					
1081	Metal mining services.....	98	53	185	27	107	23	28
109	Miscellaneous metals.....	85	61	537	81	155	74	227
1092	Mercury ores.....	68	31	19	1	5	3	10
1093	Titanium ores.....	72	81	61	3	12	10	36
1094	Uranium-radium-vanadium ores.....	85	56	434	73	135	55	171
1099	Metallic ores, n.e.c.....	177	(1)	23	4	3	6	10
11	Anthracite mining.....	68	46	704	143	136	99	326
1111	Anthracite.....	62	37	581	110	96	71	304
1112	Anthracite mining services.....	124	103	123	33	40	28	22
12	Bituminous coal and lignite mining.....	53	32	6,301	1,399	915	1,536	2,451
1211	Bituminous coal.....	52	31	6,070	1,332	858	1,498	2,382
1212	Lignite.....	172	148	76	23	15	15	23
1213	Bituminous coal and lignite mining services...	128	123	155	44	42	23	46
13	Oil and gas extraction.....	147	85	28,309	(X)	11,385	(X)	16,924
1311	Crude petroleum and natural gas.....	171	83	14,235	(X)	5,578	(X)	8,657
	Crude petroleum subindustry.....	174	85	12,502	(X)	4,723	(X)	7,779
	Natural gas subindustry.....	148	59	1,733	(X)	855	(X)	878
1321	Natural gas liquids.....	326	214	3,887	(X)	311	(X)	3,576
138	Oil and gas field services.....	105	72	10,187	(X)	5,496	(X)	4,691
1381	Drilling oil and gas wells.....	104	69	5,253	(X)	1,516	(X)	3,737
1382	Oil and gas exploration services.....	121	93	877	(X)	787	(X)	90
1389	Oil and gas field services, n.e.c.....	104	72	4,057	(X)	3,193	(X)	864
	Survey, log, cement services subindustry.....	138	129	1,138	(X)	916	(X)	222
	Miscellaneous oil and gas field services subindustry.....	95	58	2,919	(X)	2,277	(X)	642
14	Nonmetallic minerals mining.....	115	79	11,343	2,417	3,231	1,582	4,113
1411	Dimension stone.....	40	31	79	22	24	7	26
	Dimension limestone subindustry.....	63	37	18	5	5	1	7
	Dimension granite subindustry.....	36	33	28	9	8	1	10
	Dimension stone, n.e.c., subindustry.....	36	28	33	8	11	5	9
1421	Crushed and broken stone.....	118	84	4,269	844	1,020	787	1,618
	Crushed and broken limestone subindustry...	122	88	3,219	644	759	641	1,175
	Crushed and broken granite subindustry...	105	72	362	66	69	75	152
	Crushed and broken stone, n.e.c., subindustry.....	107	72	688	134	192	71	291

See footnotes at end of table.

## by Industry Group and Industry: 1963 and 1954

Prime movers (horsepower)							Electric motors (horsepower)							Ind. code
Total	By type of equipment				By use		Total	By type of equipment			By source of energy			
	Loading equipment	Transportation equipment		All other equipment	Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated and used at same establishment		
		Highway-type	Other											
(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)		
39,439	2,852	16,517	3,050	17,020	3,308	36,131	14,941	1,711	1,927	11,303	13,333	1,608		
3,420	272	850	1,129	1,169	1,106	2,314	3,371	312	597	2,462	2,695	676	10	
362	65	136	54	107	71	291	384	80	50	254	342	42	11	
2,574	551	915	500	608	239	2,335	3,781	856	1,050	1,875	3,727	54	12	
25,137	(X)	11,385	(X)	13,752	1,281	23,856	3,802	(X)	(X)	3,802	3,172	630	13	
7,946	1,964	3,231	1,367	1,384	611	7,335	3,603	463	230	2,910	3,397	206	14	
3,420	272	850	1,129	1,169	1,106	2,314	3,371	312	597	2,462	2,695	676	10	
1,653	107	266	614	666	682	971	1,381	183	168	1,030	993	388	1011	
963	35	200	387	341	320	643	1,168	80	314	774	923	245	1021	
95	16	45	18	16	8	87	344	16	68	260	340	4	1031	
34	4	20	7	3	(Z)	34	173	5	42	126	173	(Z)		
61	12	25	11	13	8	53	171	11	26	134	167	4		
106	7	37	14	48	43	63	157	15	32	110	134	23	104	
31	3	12	1	15	13	18	69	3	22	44	52	17	1042	
51	2	9	11	29	27	24	54	12	1	41	49	5	1043	
24	2	16	2	4	3	21	34	(Z)	9	25	33	1	1044	
19	1	16	1	1	-	19	10	2	2	6	10	-	1051	
41	5	24	8	4	1	40	116	7	2	107	116	-	106	
8	2	3	2	1	(Z)	8	12	1	(Z)	11	12	-	1062	
33	3	21	6	3	1	32	104	6	2	96	104	-	1064	
182	27	107	23	25	4	178	3	-	-	3	3	(Z)	1069	
361	74	155	64	68	48	313	192	9	11	172	176	16	1081	
13	1	5	3	4	2	11	6	(Z)	(Z)	6	6	(Z)	109	
27	2	12	10	3	-	27	34	1	-	33	34	-	1092	
306	70	135	45	56	42	264	143	5	11	127	128	15	1093	
15	1	3	6	5	4	11	9	3	-	6	8	1	1094	
362	65	136	54	107	71	291	384	80	50	254	342	42	1099	
257	44	96	30	87	71	186	365	68	46	251	324	41	11	
105	21	40	24	20	(Z)	105	19	12	4	3	18	1	1111	
2,574	551	915	500	608	239	2,335	3,781	856	1,050	1,875	3,727	54	12	
2,381	500	858	463	560	233	2,148	3,743	840	1,049	1,854	3,689	54	1211	
45	9	15	14	7	3	42	31	14	1	16	31	(Z)	1212	
148	42	42	23	41	3	145	7	2	(Z)	5	7	(Z)	1213	
25,137	(X)	11,385	(X)	13,752	1,281	23,856	3,802	(X)	(X)	3,802	3,172	630	13	
11,385	(X)	5,578	(X)	5,807	333	11,052	2,992	(X)	(X)	2,992	2,850	142	1311	
9,760	(X)	4,723	(X)	5,037	258	9,502	2,867	(X)	(X)	2,867	2,742	125		
1,625	(X)	855	(X)	770	75	1,550	125	(X)	(X)	125	108	17		
3,689	(X)	311	(X)	3,378	419	3,270	429	(X)	(X)	429	198	231	1321	
10,063	(X)	5,496	(X)	4,567	529	9,534	381	(X)	(X)	381	124	257	138	
5,174	(X)	1,516	(X)	3,658	449	4,725	299	(X)	(X)	299	79	220	1381	
874	(X)	787	(X)	87	39	855	34	(X)	(X)	34	3	31	1382	
4,015	(X)	3,193	(X)	822	41	3,974	48	(X)	(X)	48	42	6	1389	
1,126	(X)	916	(X)	210	-	1,126	12	(X)	(X)	12	12	-		
2,889	(X)	2,277	(X)	612	41	2,848	36	(X)	(X)	36	30	6		
7,946	1,964	3,231	1,367	1,384	611	7,335	3,603	463	230	2,910	3,397	206	14	
56	13	24	7	12	3	53	23	9	(Z)	14	23	(Z)	1411	
13	4	5	1	3	1	12	5	1	(Z)	4	5	(Z)		
18	4	8	1	5	1	17	10	5	(Z)	5	10	(Z)		
25	5	11	5	4	1	24	8	3	-	5	8	-		
2,907	669	1,020	709	509	283	2,624	1,404	175	78	1,151	1,362	42	1421	
2,237	501	759	572	405	246	1,991	1,020	143	69	808	982	38		
237	59	69	73	36	9	228	125	7	2	116	125	-		
433	109	192	64	68	28	405	259	25	7	227	255	4		

TABLE 2. Horsepower of Power Equipment Used,

Ind. code	Industry	Aggregate horsepower per production worker		Aggregate horsepower (prime movers and electric motors driven by purchased energy)				
				Total	Loading equipment	Transportation equipment		All other equipment
		1963	1954			Highway-type	Other	
				(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
INDUSTRIES—Continued								
1441	Sand and gravel.....	147	105	4,851	1,237	1,732	553	1,329
	Construction sand and gravel subindustry.	153	<sup>2</sup> 108	4,603	1,173	1,674	521	1,235
	Glass sand subindustry.....	83	48	101	21	25	5	50
	Molding sand subindustry.....	106	90	81	25	19	14	23
	Industrial sand, n.e.c., subindustry.....	64	( <sup>2</sup> )	66	18	14	13	21
145	Clay and related minerals.....	74	48	528	120	146	59	203
1452	Bentonite.....	65	63	42	7	9	12	14
1453	Fire clay.....	100	56	86	30	34	8	14
1454	Fuller's earth.....	54	46	35	5	8	4	18
1455	Kaolin and ball clay.....	66	34	192	47	55	14	76
1456	Feldspar.....	102	52	40	5	6	3	26
1459	Clay and related minerals, n.e.c.....	79	63	133	26	34	18	55
147	Chemical and fertilizer minerals.....	85	54	1,235	124	214	127	770
1472	Barite.....	66	65	60	9	18	8	25
1473	Fluorspar.....	35	49	24	1	3	2	18
1474	Potash, soda, and borate minerals.....	68	41	330	21	50	38	221
1475	Phosphate rock.....	131	78	525	75	98	33	319
1476	Rock salt.....	58	29	106	8	10	24	64
1477	Sulfur.....	94	52	151	6	32	20	93
1479	Chemical-fertilizer mining, n.e.c.....	51	44	39	4	3	2	30
1481	Nonmetallic minerals services.....	86	63	69	23	25	11	10
149	Miscellaneous minerals, n.e.c.....	68	25	312	47	70	38	157
1492	Gypsum.....	84	71	32	5	7	4	16
1493	Mica.....	74	( <sup>1</sup> )	25	7	5	1	12
1494	Native asphalt and bitumens.....	95	69	34	3	8	6	17
1495	Pumice and pumicite.....	117	115	26	7	8	3	8
1496	Talc, soapstone, and pyrophyllite.....	48	28	48	6	9	4	29
1497	Natural abrasives.....	79	56	17	1	5	3	8
1498	Peat.....	59	74	26	8	9	6	3
1499	Nonmetallic minerals, n.e.c.....	66	55	104	10	19	11	64

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available.

(X) Not applicable. (Z) Less than one-half of the unit of measure specified.

n.e.c. Not elsewhere classified.

<sup>1</sup>Not shown since the number of proprietors and firm members performing manual labor exceeds one-third of the number of production, development, and exploration workers.<sup>2</sup>Figures for the industrial sand, n.e.c., subindustry are included with those for the construction sand and gravel subindustry.

## by Industry Group and Industry: 1963 and 1954—Continued

Prime movers (horsepower)							Electric motors (horsepower)						Ind. code
Total	By type of equipment			By use			Total	By type of equipment			By source of energy		
	Loading equipment	Transportation equipment		All other equipment	Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated and used at same establishment	
		Highway-type	Other										
(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	
3,816	1,041	1,732	480	563	182	3,634	1,073	199	78	796	1,035	38	1441
3,658	995	1,675	451	537	151	3,507	974	179	72	723	945	29	
51	15	25	5	6	10	41	50	6	-	44	50	-	
59	20	19	12	8	12	47	22	5	2	15	22	-	
48	11	13	12	12	9	39	27	9	4	14	18	9	
328	106	146	47	29	11	317	201	14	12	175	200	1	145
21	7	9	4	1	-	21	21	-	8	13	21	-	1452
74	28	34	8	4	3	71	13	2	-	11	12	1	1453
24	5	8	3	8	-	24	11	-	1	10	11	-	1454
115	40	55	13	7	1	114	77	7	1	69	77	-	1455
15	5	6	3	1	5	10	25	-	-	25	25	-	1456
79	21	34	16	8	2	77	54	5	2	47	54	-	1459
592	74	214	82	222	120	472	762	57	55	650	643	119	147
40	9	18	8	5	1	39	20	(Z)	(Z)	20	20	(Z)	1472
11	1	3	1	6	5	6	19	(Z)	1	18	13	6	1473
167	14	50	21	82	66	101	244	10	25	209	163	81	1474
169	39	98	20	12	10	159	356	36	13	307	356	(Z)	1475
46	2	10	10	24	5	41	62	6	14	42	60	2	1476
150	6	32	20	92	33	117	31	4	2	25	1	30	1477
9	3	3	2	1	(Z)	9	30	1	-	29	30	-	1479
65	22	25	9	9	1	64	5	1	2	2	4	1	1481
182	39	70	33	40	11	171	135	8	5	122	130	5	149
19	4	7	3	5	1	18	13	1	1	11	13	(Z)	1492
17	7	5	1	4	-	17	8	(Z)	-	8	8	(Z)	1493
18	3	8	3	4	-	18	16	-	3	13	16	-	1494
21	6	8	3	4	1	20	5	1	-	4	5	(Z)	1495
22	4	9	3	6	1	21	26	2	1	23	26	(Z)	1496
13	1	5	3	4	3	10	4	(Z)	(Z)	4	4	(Z)	1497
24	8	9	6	1	2	22	2	(Z)	(Z)	2	2	(Z)	1498
48	6	19	11	12	3	45	61	4	-	57	56	5	1499



TABLE 3. Horsepower of Power Equipment Used, by Geographic Area:  
1963 and 1954

Geographic area and year	Aggregate horsepower per production worker	Aggregate horsepower (prime movers and electric motors driven by purchased energy) (1,000)	Prime movers (1,000 horsepower)			Electric motors (1,000 horsepower)		
			Total	Driving generators	Not driving generators	Total	Driven by purchased energy	Driven by energy generated and used at the same establishment
United States.....1963..	110	52,772	39,439	3,308	36,131	14,941	13,333	1,608
.....1954..	63	40,877	30,709	2,377	28,332	11,802	10,168	1,634
New England.....1963..	124	392	297	10	287	95	95	(2)
.....1954..	74	257	186	(NA)	(NA)	72	71	1
Maine.....1963..	84	16	13	(2)	13	3	3	(2)
.....1954..	62	18	15	(NA)	(NA)	3	3	(2)
New Hampshire.....1963..	150	25	17	-	17	8	8	-
.....1954..	58	14	11	(NA)	(NA)	3	3	-
Vermont.....1963..	64	47	29	1	28	18	18	-
.....1954..	43	51	26	(NA)	(NA)	25	25	-
Massachusetts.....1963..	120	146	110	5	105	36	36	-
.....1954..	92	91	70	(NA)	(NA)	21	21	-
Rhode Island.....1963..	148	26	22	(2)	22	4	4	(2)
.....1954..	136	19	16	(NA)	(NA)	3	3	-
Connecticut.....1963..	197	132	106	4	102	26	26	-
.....1954..	106	64	48	(NA)	(NA)	17	16	1
Middle Atlantic.....1963..	79	3,995	2,230	261	1,969	1,828	1,765	63
.....1954..	48	4,994	2,733	(NA)	(NA)	2,434	2,261	173
New York.....1963..	110	734	439	33	406	298	295	3
.....1954..	89	681	422	(NA)	(NA)	267	259	8
New Jersey.....1963..	89	256	159	5	154	99	97	2
.....1954..	60	208	132	(NA)	(NA)	85	76	9
Pennsylvania.....1963..	73	3,005	1,632	223	1,409	1,431	1,373	58
.....1954..	44	4,105	2,179	(NA)	(NA)	2,082	1,926	156
East North Central.....1963..	106	5,379	3,566	430	3,136	1,998	1,813	185
.....1954..	62	4,274	2,803	(NA)	(NA)	1,704	1,471	233
Ohio.....1963..	111	1,576	1,128	64	1,064	459	448	11
.....1954..	60	1,043	763	(NA)	(NA)	297	280	17
Indiana.....1963..	104	614	376	18	358	245	238	7
.....1954..	57	544	339	(NA)	(NA)	219	205	14
Illinois.....1963..	87	1,567	968	76	892	631	599	32
.....1954..	54	1,429	834	(NA)	(NA)	638	595	43
Michigan.....1963..	124	1,257	817	263	554	573	440	133
.....1954..	68	940	631	(NA)	(NA)	443	309	134
Wisconsin.....1963..	146	365	277	9	268	90	88	2
.....1954..	91	318	236	(NA)	(NA)	107	82	25
West North Central.....1963..	140	4,892	3,846	703	3,143	1,416	1,046	370
.....1954..	85	3,649	2,869	(NA)	(NA)	946	780	166
Minnesota.....1963..	177	1,757	1,340	540	800	751	417	334
.....1954..	89	1,229	878	(NA)	(NA)	451	351	100
Iowa.....1963..	142	320	258	20	238	65	62	3
.....1954..	121	284	251	(NA)	(NA)	34	33	1
Missouri.....1963..	103	602	369	36	333	235	233	2
.....1954..	73	488	259	(NA)	(NA)	230	229	1
North Dakota.....1963..	182	248	214	10	204	34	34	(2)
.....1954..	76	107	105	(NA)	(NA)	4	2	2
South Dakota.....1963..	66	146	88	15	73	75	58	17
.....1954..	52	130	106	(NA)	(NA)	71	24	47
Nebraska.....1963..	149	256	217	5	212	39	39	(2)
.....1954..	110	158	145	(NA)	(NA)	14	13	1
Kansas.....1963..	136	1,563	1,360	77	1,283	217	203	14
.....1954..	84	1,253	1,125	(NA)	(NA)	142	128	14
South Atlantic.....1963..	63	4,528	2,296	181	2,115	2,263	2,232	31
.....1954..	33	3,274	1,539	(NA)	(NA)	1,784	1,735	49
Delaware, Maryland, and the District of Columbia.....1963..	113	230	173	27	146	57	57	(2)
.....1954..	68	124	102	(NA)	(NA)	22	22	-
Virginia.....1963..	53	748	408	20	388	349	340	9
.....1954..	28	408	205	(NA)	(NA)	210	203	7
West Virginia.....1963..	49	2,063	915	111	804	1,169	1,148	21
.....1954..	28	1,946	804	(NA)	(NA)	1,166	1,142	24
North Carolina.....1963..	119	269	169	1	168	100	100	-
.....1954..	35	131	89	(NA)	(NA)	43	42	1
South Carolina.....1963..	115	169	123	5	118	46	46	-
.....1954..	63	86	58	(NA)	(NA)	28	28	-
Georgia.....1963..	72	356	215	3	212	142	141	1
.....1954..	42	164	106	(NA)	(NA)	58	58	(2)
Florida.....1963..	135	693	293	14	279	400	400	(2)
.....1954..	75	415	175	(NA)	(NA)	257	240	17

See footnotes at end of table.

TABLE 3. Horsepower of Power Equipment Used, by Geographic Area:  
1963 and 1954—Continued

Geographic area and year	Aggregate horsepower per production worker	Aggregate horsepower (prime movers and electric motors driven by purchased energy) (1,000)	Prime movers (1,000 horsepower)			Electric motors (1,000 horsepower)		
			Total	Driving generators	Not driving generators	Total	Driven by purchased energy	Driven by energy generated and used at the same establishment
East South Central.....1963..	70	3,015	1,763	92	1,671	1,277	1,252	25
.....1954..	33	1,973	1,083	(NA)	(NA)	910	890	20
Kentucky.....1963..	61	1,512	726	32	694	791	786	5
.....1954..	26	943	501	(NA)	(NA)	458	442	16
Tennessee.....1963..	76	455	264	28	236	193	191	2
.....1954..	41	360	207	(NA)	(NA)	156	153	3
Alabama.....1963..	67	530	293	15	278	254	237	17
.....1954..	32	418	142	(NA)	(NA)	276	276	(Z)
Mississippi.....1963..	130	518	480	17	463	39	38	1
.....1954..	82	252	233	(NA)	(NA)	20	19	1
West South Central.....1963..	149	20,187	17,940	972	16,968	2,798	2,247	551
.....1954..	84	13,836	12,865	(NA)	(NA)	1,316	971	345
Arkansas.....1963..	101	402	318	9	309	89	84	5
.....1954..	69	359	283	(NA)	(NA)	76	76	-
Louisiana.....1963..	118	4,115	3,959	405	3,554	408	156	252
.....1954..	80	2,354	2,278	(NA)	(NA)	174	76	98
Oklahoma.....1963..	142	3,033	2,691	96	2,595	375	342	33
.....1954..	76	2,300	2,017	(NA)	(NA)	320	283	37
Texas.....1963..	167	12,637	10,972	462	10,510	1,926	1,665	261
.....1954..	90	8,823	8,287	(NA)	(NA)	746	536	210
Mountain.....1963..	100	6,198	4,120	425	3,695	2,348	2,078	270
.....1954..	69	4,710	3,354	(NA)	(NA)	1,878	1,356	522
Montana.....1963..	88	537	353	7	346	185	184	1
.....1954..	60	538	257	(NA)	(NA)	282	281	1
Idaho.....1963..	58	162	75	2	73	87	87	(Z)
.....1954..	54	223	113	(NA)	(NA)	115	110	5
Wyoming.....1963..	146	968	725	51	674	273	243	30
.....1954..	91	682	553	(NA)	(NA)	161	129	32
Colorado.....1963..	83	692	460	20	440	237	232	5
.....1954..	65	701	517	(NA)	(NA)	200	184	16
New Mexico.....1963..	114	1,575	1,223	153	1,070	451	352	99
.....1954..	71	825	719	(NA)	(NA)	196	106	90
Arizona.....1963..	92	1,182	724	160	564	590	458	132
.....1954..	81	889	683	(NA)	(NA)	431	206	225
Utah.....1963..	82	748	329	12	317	422	419	3
.....1954..	49	498	295	(NA)	(NA)	330	203	127
Nevada.....1963..	143	334	231	20	211	103	103	-
.....1954..	77	354	217	(NA)	(NA)	163	137	26
Pacific.....1963..	145	4,186	3,381	234	3,147	918	805	113
.....1954..	113	3,910	3,277	(NA)	(NA)	758	633	125
Washington.....1963..	115	178	124	8	116	60	54	6
.....1954..	159	400	312	(NA)	(NA)	97	88	9
Oregon.....1963..	116	183	145	6	139	39	38	1
.....1954..	110	141	116	(NA)	(NA)	25	25	(Z)
California.....1963..	147	3,572	2,911	176	2,735	758	661	97
.....1954..	103	3,203	2,687	(NA)	(NA)	579	516	63
Alaska.....1963..	184	209	161	44	117	57	48	9
.....1954..	126	151	150	(NA)	(NA)	54	1	53
Hawaii.....1963..	153	44	40	-	40	4	4	(Z)
.....1954..	96	15	12	(NA)	(NA)	3	3	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies.  
(X) Not applicable. (Z) Less than one-half of the unit of measure specified.

(NA) Not available.

TABLE 4. Horsepower of Power Equipment Used, by Geographic

Industry code	Geographic area and industry group	Aggregate horsepower per production worker	Aggregate horsepower (prime movers and electric motors driven by purchased energy)				
			Total	Loading equipment	Transportation equipment		All other equipment
					Highway-type	Other	
			(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
	United States, total.....	110	52,772	4,516	16,517	4,913	26,826
10	Metal mining.....	98	6,115	557	850	1,696	3,012
11	Anthracite mining.....	68	704	143	136	99	326
12	Bituminous coal and lignite mining.....	53	6,301	1,399	915	1,536	2,451
13	Oil and gas extraction.....	147	28,309	(X)	11,385	(X)	16,924
14	Nonmetallic minerals mining.....	115	11,343	2,417	3,231	1,582	4,113
	GEOGRAPHIC AREA						
10 & 14	New England.....	124	392	87	175	41	89
10 & 14	Maine.....	84	16	4	6	2	4
14	New Hampshire.....	150	25	3	11	4	7
14	Vermont.....	64	47	9	17	6	15
14	Massachusetts.....	120	146	35	60	17	34
14	Rhode Island.....	148	26	7	14	1	4
10 & 14	Connecticut.....	197	132	29	67	11	25
	Middle Atlantic.....	79	3,995	774	868	606	1,747
10	Metal mining.....	71	308	36	32	53	187
11	Anthracite mining.....	68	704	143	136	99	326
12	Bituminous coal mining.....	58	1,222	303	151	283	485
13	Oil and gas extraction.....	119	461	(X)	194	(X)	267
14	Nonmetallic minerals mining.....	117	1,300	292	355	171	482
	New York.....	110	734	122	202	113	297
10	Metal mining.....	87	167	20	25	44	78
13	Oil and gas extraction.....	132	86	(X)	37	(X)	49
14	Nonmetallic minerals mining.....	118	481	102	140	69	170
	New Jersey.....	89	256	64	67	27	98
10	Metal mining.....	46	29	4	2	6	17
14	Nonmetallic minerals mining.....	101	227	60	65	21	81
	Pennsylvania.....	73	3,005	588	599	466	1,352
10	Metal mining.....	63	112	12	5	3	92
11	Anthracite mining.....	68	704	143	136	99	326
12	Bituminous coal mining.....	58	1,222	303	151	283	485
13	Oil and gas extraction.....	116	375	(X)	157	(X)	218
14	Nonmetallic minerals mining.....	124	592	130	150	81	231
	East North Central.....	106	5,379	980	1,311	806	2,282
10	Metal mining.....	109	657	49	58	108	442
12	Bituminous coal mining.....	82	1,456	403	280	318	455
13	Oil and gas extraction.....	106	1,063	(X)	423	(X)	640
14	Nonmetallic minerals mining.....	130	2,203	528	550	380	745
	Ohio.....	111	1,576	333	468	224	551
12	Bituminous coal mining.....	100	722	162	215	119	226
13	Oil and gas extraction.....	108	218	(X)	95	(X)	123
	Indiana.....	104	614	140	128	95	251
12	Bituminous coal mining.....	76	197	64	26	44	63
13	Oil and gas extraction.....	98	103	(X)	44	(X)	59
14	Nonmetallic minerals mining.....	138	314	76	58	51	129
	Illinois.....	87	1,567	299	327	268	673
12	Bituminous coal mining.....	68	537	177	39	155	166
13	Oil and gas extraction.....	146	506	(X)	198	(X)	308
	Michigan.....	124	1,257	148	229	178	702
10	Metal mining.....	114	626	47	52	102	425
13	Oil and gas extraction.....	152	236	(X)	86	(X)	150
14	Nonmetallic minerals mining.....	127	395	101	91	76	127
	Wisconsin.....	146	365	60	159	41	105
10	Metal mining.....	82	23	1	4	6	12
14	Nonmetallic minerals mining.....	154	342	59	155	35	93
	West North Central.....	140	4,892	487	1,281	855	2,269
10	Metal mining.....	146	1,803	164	135	638	866
12	Bituminous coal and lignite mining.....	110	135	38	20	34	43
13	Oil and gas extraction.....	140	1,612	(X)	687	(X)	925
14	Nonmetallic minerals mining.....	138	1,342	285	439	183	435
	Minnesota.....	177	1,757	191	186	586	794
10	Metal mining.....	184	1,565	148	112	563	742
14	Nonmetallic minerals mining.....	134	192	43	74	23	52

See footnotes at end of table.

# Area and Major Industry Group: 1963

Prime movers (horsepower)							Electric motors (horsepower)						Industry code
Total	By type of equipment				By use		Total	By type of equipment			By source of energy		
	Loading equipment	Transportation equipment		All other equipment	Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated and used at same establishment	
		Highway-type	Other										
(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	
39,439	2,852	16,517	3,050	17,020	3,308	36,131	14,941	1,711	1,927	11,303	13,333	1,608	
3,420	272	850	1,129	1,169	1,106	2,314	3,371	312	597	2,462	2,695	676	10
362	65	136	54	107	71	291	384	80	50	254	342	42	11
2,574	551	915	500	608	239	2,335	3,781	856	1,050	1,875	3,727	54	12
25,137	(X)	11,385	(X)	13,752	1,281	23,856	3,802	(X)	(X)	3,802	3,172	630	13
7,946	1,964	3,231	1,367	1,384	611	7,335	3,603	463	230	2,910	3,397	206	14
297	74	175	32	16	10	287	95	13	9	73	95	(Z)	10 & 14
13	4	6	1	2	(Z)	13	3	(Z)	1	2	3	(Z)	10 & 14
17	2	11	2	2	-	17	8	1	2	5	8	-	14
29	4	17	6	2	1	28	18	5	(Z)	13	18	-	14
110	30	60	14	6	5	105	36	5	3	28	36	-	14
22	7	14	1	(Z)	(Z)	22	4	(Z)	-	4	4	(Z)	14
106	27	67	8	4	4	102	26	2	3	21	26	-	10 & 14
2,230	513	868	265	584	261	1,969	1,828	264	351	1,213	1,765	63	
61	9	32	16	4	3	58	247	27	41	179	247	-	10
362	65	136	54	107	71	291	384	80	50	254	342	42	11
543	201	151	44	147	100	443	684	103	240	341	679	5	12
402	(X)	194	(X)	208	26	376	67	(X)	(X)	67	59	8	13
862	238	355	151	118	61	801	446	54	20	372	438	8	14
439	88	202	72	77	33	406	298	34	41	223	295	3	
42	4	25	10	3	3	39	125	16	34	75	125	-	10
74	(X)	37	(X)	37	1	73	12	(X)	(X)	12	12	-	13
323	84	140	62	37	29	294	161	18	7	136	158	3	14
159	53	67	20	19	5	154	99	11	7	81	97	2	
5	2	2	1	(Z)	-	5	24	2	5	17	24	-	10
154	51	65	19	19	5	149	75	9	2	64	73	2	14
1,632	372	599	173	488	223	1,409	1,431	219	303	909	1,373	58	
14	3	5	5	1	-	14	98	9	2	87	98	-	10
362	65	136	54	107	71	291	384	80	50	254	342	42	11
543	201	151	44	147	100	443	684	103	240	341	679	5	12
328	(X)	157	(X)	171	25	303	55	(X)	(X)	55	47	8	13
385	103	150	70	62	27	358	210	27	11	172	207	3	14
3,566	530	1,311	596	1,129	430	3,136	1,998	450	210	1,338	1,813	185	
347	10	58	52	227	223	124	440	44	62	334	310	130	10
776	132	280	216	148	63	713	689	274	104	311	680	9	12
902	(X)	423	(X)	479	16	886	166	(X)	(X)	166	161	5	13
1,541	388	550	328	275	128	1,413	703	132	44	527	662	41	14
1,128	226	468	160	274	64	1,064	459	97	55	307	448	11	
497	100	215	78	104	40	457	228	63	42	123	225	3	12
206	(X)	95	(X)	111	2	204	12	(X)	(X)	12	12	(Z)	13
376	74	128	86	88	18	358	245	68	10	167	238	7	
81	6	26	38	11	3	78	120	59	7	54	116	4	12
85	(X)	44	(X)	41	(Z)	85	18	(X)	(X)	18	18	(Z)	13
210	68	58	48	36	15	195	107	9	3	95	104	3	14
968	113	327	210	318	76	892	631	189	60	382	599	32	
198	26	39	100	33	20	178	341	152	55	134	339	2	12
388	(X)	198	(X)	190	9	379	121	(X)	(X)	121	118	3	13
817	75	229	113	400	263	554	573	78	71	424	440	133	
339	10	52	51	226	223	116	417	42	57	318	287	130	10
223	(X)	86	(X)	137	5	218	15	(X)	(X)	15	13	2	13
255	65	91	62	37	35	220	141	36	14	91	140	1	14
277	42	159	27	49	9	268	90	18	14	58	88	2	
5	(Z)	4	1	(Z)	-	5	18	1	5	12	18	-	10
272	42	155	26	49	9	263	72	17	9	46	70	2	14
3,846	320	1,281	712	1,533	703	3,143	1,416	177	144	1,095	1,046	370	
1,241	56	135	520	530	550	691	912	118	119	675	562	350	10
85	11	20	32	22	3	82	50	27	2	21	50	-	12
1,425	(X)	687	(X)	738	75	1,350	197	(X)	(X)	197	187	10	13
1,095	253	439	160	243	75	1,020	257	32	23	202	247	10	14
1,340	89	186	529	536	540	800	751	112	58	581	417	334	
1,182	51	112	507	512	537	645	716	107	57	552	383	333	10
158	38	74	22	24	3	155	35	5	1	29	34	1	14

TABLE 4. Horsepower of Power Equipment Used, by Geographic

Industry code	Geographic area and industry group	Aggregate horsepower per production worker	Aggregate horsepower (prime movers and electric motors driven by purchased energy)				
			Total	Loading equipment	Transportation equipment		All other equipment
					Highway-type	Other	
			(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
	West North Central—Continued						
	Iowa.....	142	320	70	95	55	100
12	Bituminous coal mining.....	52	14	4	3	1	6
14	Nonmetallic minerals mining.....	155	306	66	92	54	94
	Missouri.....	103	602	109	125	113	255
10	Metal mining.....	80	165	10	13	51	91
12	Bituminous coal mining.....	144	60	18	5	15	22
13	Oil and gas extraction.....	43	12	(X)	5	(X)	7
14	Nonmetallic minerals mining.....	110	365	81	102	47	135
	North Dakota.....	182	248	18	92	19	119
13	Oil and gas extraction.....	187	158	(X)	63	(X)	95
	South Dakota.....	66	146	19	37	38	52
13	Oil and gas extraction.....	182	2	(X)	(Z)	(X)	2
	Nebraska.....	149	256	22	95	10	129
13	Oil and gas extraction.....	159	116	(X)	43	(X)	73
14	Nonmetallic minerals mining.....	142	140	22	52	10	56
	Kansas.....	136	1,563	58	651	34	820
10	Metal mining.....	45	2	(Z)	(Z)	(Z)	2
12	Bituminous coal mining.....	59	14	5	2	4	3
13	Oil and gas extraction.....	133	1,324	(X)	576	(X)	748
14	Nonmetallic minerals mining.....	170	223	53	73	30	67
	South Atlantic.....	63	4,528	699	933	760	2,136
10	Metal mining.....	64	56	8	16	2	30
12	Bituminous coal mining.....	41	1,923	290	252	498	883
13	Oil and gas extraction.....	120	488	(X)	177	(X)	311
14	Nonmetallic minerals mining.....	108	2,061	401	488	260	912
	Delaware and Maryland.....	113	230	56	70	35	69
12	Bituminous coal mining.....	63	25	6	8	3	8
14	Nonmetallic minerals mining.....	125	200	50	59	32	59
	Virginia.....	53	748	124	174	154	296
10	Metal mining.....	50	16	3	1	2	10
12	Bituminous coal mining.....	36	381	54	69	100	158
13	Oil and gas extraction.....	167	1	(X)	-	(X)	1
14	Nonmetallic minerals mining.....	110	350	67	104	52	127
	West Virginia.....	49	2,063	254	361	411	1,037
12	Bituminous coal mining.....	41	1,517	230	175	395	717
13	Oil and gas extraction.....	116	461	(X)	170	(X)	291
14	Nonmetallic minerals mining.....	83	85	24	16	16	29
	North Carolina.....	119	269	53	54	40	122
	South Carolina.....	115	169	34	44	22	69
	Georgia.....	72	356	74	84	40	158
	Florida.....	135	693	104	146	58	385
	East South Central.....	70	3,015	499	733	472	1,311
10	Metal mining.....	84	138	22	33	18	65
12	Bituminous coal mining.....	48	1,249	294	158	330	467
13	Oil and gas extraction.....	110	770	(X)	290	(X)	480
14	Nonmetallic minerals mining.....	102	858	183	252	124	299
	Kentucky.....	61	1,512	299	272	300	641
12	Bituminous coal mining.....	49	927	235	110	251	331
13	Oil and gas extraction.....	89	303	(X)	92	(X)	211
14	Nonmetallic minerals mining.....	110	282	64	70	49	99
	Tennessee.....	76	455	95	107	71	182
10	Metal mining.....	76	60	7	4	16	33
12	Bituminous coal mining.....	37	62	21	9	13	19
13	Oil and gas extraction.....	189	3	(X)	(Z)	(X)	3
14	Nonmetallic minerals mining.....	93	330	67	94	42	127
	Alabama.....	67	530	84	125	88	233
10	Metal mining.....	92	78	15	29	2	32
12	Bituminous coal mining.....	50	260	38	39	66	117
13	Oil and gas extraction.....	121	41	(X)	15	(X)	26
14	Nonmetallic minerals mining.....	95	151	31	42	20	58

See footnotes at end of table.

## Area and Major Industry Group: 1963—Continued

Prime movers (horsepower)							Electric motors (horsepower)						Industry code
Total	By type of equipment				By use		Total	By type of equipment			By source of energy		
	Loading equipment	Transportation equipment		All other equipment	Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated and used at same establishment	
		Highway-type	Other										
(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	
258	64	95	41	58	20	238	65	6	14	45	62	3	
9	3	3	1	2	(Z)	9	5	1	-	4	5	-	12
249	61	92	40	56	20	229	60	5	14	41	57	3	14
369	75	125	70	99	36	333	235	34	43	158	233	2	
30	3	13	11	3	(Z)	30	135	7	40	88	135	-	10
37	1	5	15	16	-	37	23	17	(Z)	6	23	-	12
11	(X)	5	(X)	6	-	11	1	(X)	(X)	1	1	-	13
291	71	102	44	74	36	255	76	10	3	63	74	2	14
214	10	92	16	96	10	204	34	8	3	23	34	(Z)	
146	(X)	63	(X)	83	5	141	12	(X)	(X)	12	12	-	13
88	14	37	16	21	15	73	75	5	22	48	58	17	
1	(X)	(Z)	(X)	1	1	-	1	(X)	(X)	1	1	-	13
217	20	95	10	92	5	212	39	2	-	37	39	(Z)	
104	(X)	43	(X)	61	3	101	12	(X)	(X)	12	12	(Z)	13
113	20	52	10	31	2	111	27	2	-	25	27	(Z)	14
1,360	48	651	30	631	77	1,283	217	10	4	203	203	14	
(Z)	(Z)	(Z)	(Z)	(Z)	-	(Z)	2	-	-	2	2	-	10
8	1	2	4	1	(Z)	8	6	4	-	2	6	-	12
1,163	(X)	576	(X)	587	66	1,097	171	(X)	(X)	171	161	10	13
189	47	73	26	43	11	178	38	6	4	28	34	4	14
2,296	410	933	303	650	181	2,115	2,263	290	469	1,504	2,232	31	
25	7	16	1	1	(Z)	25	31	1	1	29	31	-	10
600	100	252	69	179	32	568	1,339	191	434	714	1,322	17	12
446	(X)	177	(X)	269	88	358	44	(X)	(X)	44	42	2	13
1,225	303	488	233	201	61	1,164	849	98	34	717	837	12	14
173	47	70	29	27	27	146	57	9	6	42	57	(Z)	
19	5	8	1	5	3	16	6	1	2	3	6	-	12
150	42	59	28	21	24	126	50	8	4	38	50	(Z)	14
408	80	174	69	85	20	388	349	44	91	214	340	9	
4	2	1	1	(Z)	(Z)	4	12	1	1	10	12	-	10
150	19	69	17	45	9	141	233	35	83	115	230	3	12
1	(X)	-	(X)	1	-	1	(Z)	(X)	(X)	(Z)	(Z)	-	13
253	59	104	51	39	11	242	104	8	7	89	98	6	14
915	94	361	67	393	111	804	1,169	161	351	657	1,148	21	
431	76	175	51	129	20	411	1,100	155	349	596	1,086	14	12
424	(X)	170	(X)	254	84	340	39	(X)	(X)	39	37	2	13
60	18	16	16	10	7	53	30	6	2	22	25	5	14
169	41	54	38	36	1	168	100	12	1	87	100	-	
123	31	44	20	28	5	118	46	3	2	41	46	-	
215	64	84	38	29	3	212	142	10	2	130	141	1	
293	53	146	42	52	14	279	400	51	16	333	400	(Z)	
1,763	240	733	224	566	92	1,671	1,277	264	263	750	1,252	25	
67	20	33	5	9	(Z)	67	71	4	22	45	71	-	10
425	82	158	111	74	32	393	843	215	224	404	824	19	12
698	(X)	290	(X)	408	19	679	75	(X)	(X)	75	72	3	13
573	138	252	108	75	41	532	288	45	17	226	285	3	14
726	92	272	131	231	32	694	791	207	169	415	786	5	
280	47	110	89	34	14	266	648	188	162	298	647	1	12
265	(X)	92	(X)	173	4	261	40	(X)	(X)	40	38	2	13
181	45	70	42	24	14	167	103	19	7	77	101	2	14
264	72	107	45	40	28	236	193	24	26	143	191	2	
15	5	4	3	3	-	15	45	2	13	30	45	-	10
35	13	9	4	9	5	30	29	8	9	12	27	2	12
2	(X)	(Z)	(X)	2	-	2	1	(X)	(X)	1	1	-	13
212	54	94	38	26	23	189	118	14	4	100	118	(Z)	14
293	61	125	37	70	15	278	254	28	66	160	237	17	
52	15	29	2	6	(Z)	52	26	2	9	15	26	-	10
110	22	39	18	31	13	97	166	19	53	94	150	16	12
29	(X)	15	(X)	14	(Z)	29	12	(X)	(X)	12	12	-	13
102	24	42	17	19	2	100	50	7	4	39	49	1	14

TABLE 4. Horsepower of Power Equipment Used, by Geographic

Industry code	Geographic area and industry group	Aggregate horsepower per production worker	Aggregate horsepower (prime movers and electric motors driven by purchased energy)				
			Total	Loading equipment	Transportation equipment		All other equipment
					Highway-type	Other	
			(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
	East South Central—Continued						
	Mississippi.....	130	518	21	229	13	255
13	Oil and gas extraction.....	130	423	(X)	183	(X)	240
14	Nonmetallic minerals mining.....	132	95	21	46	13	15
	West South Central.....	149	20,187	263	8,111	172	11,641
13	Oil and gas extraction.....	153	18,967	(X)	7,742	(X)	11,225
14	Nonmetallic minerals mining.....	106	1,072	221	325	160	366
	Arkansas.....	101	402	27	138	23	214
13	Oil and gas extraction.....	128	236	(X)	95	(X)	141
14	Nonmetallic minerals mining.....	83	133	22	26	20	65
	Louisiana.....	118	4,115	42	1,345	35	2,693
13	Oil and gas extraction.....	120	3,890	(X)	1,296	(X)	2,594
14	Nonmetallic minerals mining.....	88	225	42	49	35	99
	Oklahoma.....	142	3,033	38	1,251	20	1,724
13	Oil and gas extraction.....	145	2,872	(X)	1,202	(X)	1,670
14	Nonmetallic minerals mining.....	95	100	20	33	16	31
	Texas.....	167	12,637	156	5,377	94	7,010
13	Oil and gas extraction.....	170	11,969	(X)	5,149	(X)	6,820
14	Nonmetallic minerals mining.....	124	614	137	217	89	171
	Mountain.....	100	6,198	400	1,716	1,003	3,079
10	Metal mining.....	83	2,817	233	494	811	1,279
12	Bituminous coal and lignite mining.....	63	220	41	28	63	88
13	Oil and gas extraction.....	154	2,411	(X)	997	(X)	1,414
14	Nonmetallic minerals mining.....	84	750	126	197	129	298
	Montana.....	88	537	31	145	91	270
10	Metal mining.....	75	265	23	33	79	130
13	Oil and gas extraction.....	130	216	(X)	96	(X)	120
	Idaho.....	58	162	21	29	29	83
10	Metal mining.....	43	100	3	14	15	68
14	Nonmetallic minerals mining.....	145	62	18	15	14	15
	Wyoming.....	146	968	69	344	53	502
10	Metal mining.....	133	185	55	28	39	63
12	Bituminous coal mining.....	112	35	9	8	11	7
13	Oil and gas extraction.....	177	691	(X)	291	(X)	400
14	Nonmetallic minerals mining.....	56	57	5	17	3	32
	Colorado.....	83	692	54	200	52	387
10	Metal mining.....	57	241	19	63	17	142
12	Bituminous coal mining.....	41	50	13	5	17	16
13	Oil and gas extraction.....	150	290	(X)	106	(X)	184
14	Nonmetallic minerals mining.....	109	111	22	26	18	45
	New Mexico.....	114	1,575	45	542	109	879
13	Oil and gas extraction.....	149	1,056	(X)	441	(X)	615
14	Nonmetallic minerals mining.....	56	185	15	41	21	108
	Arizona.....	92	1,182	83	204	355	540
10	Metal mining.....	89	1,066	56	164	342	504
13	Oil and gas extraction.....	118	4	(X)	3	(X)	1
14	Nonmetallic minerals mining.....	98	112	27	37	13	35
	Utah.....	82	747	61	149	223	314
12	Bituminous coal mining.....	62	98	15	9	31	43
13	Oil and gas extraction.....	144	148	(X)	56	(X)	92
	Nevada.....	143	334	36	103	91	104
10	Metal mining.....	144	260	22	77	83	78
14	Nonmetallic minerals mining.....	136	68	14	22	8	24
	Pacific.....	145	4,186	327	1,389	197	2,273
10	Metal mining.....	119	254	34	63	27	130
12	Bituminous coal mining.....	67	24	4	6	8	6
13	Oil and gas extraction.....	164	2,544	(X)	901	(X)	1,643
14	Nonmetallic minerals mining.....	125	1,364	289	419	162	494

See footnotes at end of table.

## Area and Major Industry Group: 1963—Continued

Prime movers (horsepower)							Electric motors (horsepower)						Industry code
Total	By type of equipment				By use		Total	By type of equipment			By source of energy		
	Loading equipment	Transportation equipment		All other equipment	Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated and used at same establishment	
		Highway-type	Other										
(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	
480	15	229	11	225	17	463	39	5	2	32	38	1	13 14
402	(X)	183	(X)	219	15	387	22	(X)	(X)	22	21	1	
78	15	46	11	6	2	76	17	5	2	10	17	-	
17,940	220	8,111	157	9,452	972	16,968	2,798	55	31	2,712	2,247	551	13 14
17,005	(X)	7,742	(X)	9,263	873	16,132	2,470	(X)	(X)	2,470	1,962	508	
847	198	326	147	176	96	751	267	35	28	204	225	42	
318	21	139	23	135	9	309	89	6	1	82	84	5	13 14
208	(X)	95	(X)	113	1	207	28	(X)	(X)	28	28	-	
87	18	27	21	21	8	79	51	4	-	47	46	5	
3,959	33	1,345	28	2,553	405	3,554	408	13	7	388	156	252	13 14
3,777	(X)	1,296	(X)	2,481	384	3,393	346	(X)	(X)	346	113	233	
182	33	49	28	72	21	161	62	13	7	42	43	19	
2,691	22	1,251	10	1,408	96	2,595	375	16	10	349	342	33	13 14
2,589	(X)	1,202	(X)	1,387	91	2,498	313	(X)	(X)	313	283	30	
69	14	33	7	15	2	67	33	6	9	18	31	2	
10,972	144	5,376	96	5,356	462	10,510	1,926	20	13	1,893	1,665	261	13 14
10,431	(X)	5,149	(X)	5,282	397	10,034	1,783	(X)	(X)	1,783	1,538	245	
509	133	217	91	68	65	444	121	12	12	97	105	16	
4,120	268	1,716	586	1,550	425	3,695	2,348	139	428	1,781	2,078	270	10 12 13 14
1,470	143	494	485	348	278	1,192	1,533	99	346	1,088	1,347	186	
86	14	28	18	26	3	83	134	27	45	62	133	1	
2,058	(X)	997	(X)	1,061	95	1,963	386	(X)	(X)	386	353	33	13 14
506	111	197	83	115	49	457	295	13	37	245	245	50	
353	15	145	82	111	7	346	185	17	9	159	184	1	
118	8	33	71	6	2	116	147	16	8	123	147	-	10 13
196	(X)	96	(X)	100	3	193	21	(X)	(X)	21	20	1	
75	21	29	15	10	2	73	87	(Z)	13	74	87	(Z)	
23	3	14	2	4	(Z)	23	77	(Z)	12	65	77	(Z)	10 14
52	18	15	13	6	2	50	10	(Z)	1	9	10	(Z)	
725	62	344	47	272	51	674	273	11	10	252	243	30	
126	52	28	34	12	12	114	59	3	5	51	59	-	10 12 13 14
26	4	8	10	4	1	25	9	5	1	3	9	-	
534	(X)	291	(X)	243	29	505	172	(X)	(X)	172	157	15	
39	6	17	3	13	9	30	33	3	4	26	18	15	
460	33	200	37	190	20	440	237	21	15	201	232	5	10 12 13 14
108	13	63	15	17	5	103	133	6	2	125	133	(Z)	
15	2	5	4	4	1	14	36	11	13	12	35	1	
251	(X)	106	(X)	145	7	244	43	(X)	(X)	43	39	4	13 14
86	18	26	18	24	7	79	25	4	(Z)	21	25	-	
1,223	30	542	15	636	153	1,070	451	20	101	330	352	99	
948	(X)	441	(X)	507	53	895	119	(X)	(X)	119	108	11	13 14
85	10	41	5	29	16	69	134	8	22	104	100	34	
724	54	204	257	209	160	564	590	36	118	436	458	132	
627	28	164	245	190	156	471	571	35	117	419	439	132	10 13 14
4	(X)	3	(X)	1	-	4	(Z)	(X)	(X)	(Z)	(Z)	-	
93	26	37	12	18	4	89	19	1	1	17	19	(Z)	
329	30	149	58	92	12	317	422	21	146	255	419	3	12 13
21	5	9	2	5	1	20	77	10	29	38	77	-	
119	(X)	56	(X)	63	3	116	31	(X)	(X)	31	29	2	
231	23	103	75	30	20	211	103	13	16	74	103	-	10 14
177	13	77	68	19	18	159	83	9	15	59	83	-	
48	10	22	7	9	2	46	20	4	1	15	20	-	
3,381	277	1,389	175	1,540	234	3,147	918	59	24	835	805	113	10 12 13 14
157	11	63	25	58	47	110	107	24	3	80	97	10	
18	3	6	6	3	3	15	9	1	2	6	6	3	
2,206	(X)	901	(X)	1,305	101	2,105	399	(X)	(X)	399	338	61	13 14
1,000	263	419	144	174	83	917	403	34	19	350	364	39	



TABLE 4. Horsepower of Power Equipment Used, by Geographic

Industry code	Geographic area and industry group	Aggregate horsepower per production worker	Aggregate horsepower (prime movers and electric motors driven by purchased energy)				
			Total	Loading equipment	Transportation equipment		All other equipment
					Highway-type	Other	
			(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
	Pacific—Continued						
	Washington.....	115	178	29	60	17	72
13	Oil and gas extraction.....	115	9	(X)	4	(X)	5
14	Nonmetallic minerals mining.....	155	135	23	49	12	51
	Oregon.....	116	183	37	67	22	57
10	Metal mining.....	125	13	3	3	4	3
14	Nonmetallic minerals mining.....	116	169	34	63	18	54
	California.....	147	3,572	231	1,197	131	2,013
13	Oil and gas extraction.....	166	2,442	(X)	866	(X)	1,576
14	Nonmetallic minerals mining.....	122	1,008	218	282	126	382
	Alaska.....	184	209	20	43	21	125
10	Metal mining.....	364	91	13	6	15	57
12	Bituminous coal mining.....	105	18	3	4	6	5
13	Oil and gas extraction.....	141	92	(X)	30	(X)	62
14	Nonmetallic minerals mining.....	123	8	4	3	-	1
	Hawaii.....	153	44	10	22	6	6

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available.  
 (X) Not applicable. (Z) Less than one-half of the unit of measure specified.

## Area and Major Industry Group: 1963—Continued

Prime movers (horsepower)							Electric motors (horsepower)						Industry code
Total	By type of equipment			By use		Total	By type of equipment			By source of energy			
	Loading equipment	Transportation equipment		All other equipment	Driving generators		Not driving generators	Loading equipment	Transporta- tion equipment	All other equipment	Driven by purchased energy	Driven by energy gen- erated and used at same establishment	
		Highway-type	Other										
(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	
124	21	60	12	31	8	116	60	8	6	46	54	6	
8	(X)	4	(X)	4	-	8	1	(X)	(X)	1	1	- 13	
99	19	49	10	21	3	96	38	4	2	32	36	2 14	
145	30	67	21	27	6	139	39	7	1	31	38	1	
10	2	3	4	1	-	10	3	1	(Z)	2	3	- 10	
134	28	63	17	26	6	128	36	6	1	29	35	1 14	
2,911	207	1,197	116	1,391	176	2,735	758	32	16	710	661	97	
2,115	(X)	866	(X)	1,249	92	2,023	388	(X)	(X)	388	327	61 13	
720	202	282	111	125	73	647	324	24	16	284	288	36 14	
161	9	43	20	89	44	117	57	12	1	44	48	9	
56	2	6	14	34	31	25	41	12	1	28	35	6 10	
16	3	4	6	3	3	13	5	(Z)	-	5	2	3 12	
82	(X)	30	(X)	52	9	73	10	(X)	(X)	10	10	- 13	
7	4	3	-	(Z)	1	6	1	-	-	1	1	- 14	
40	10	22	6	2	-	40	4	-	-	4	4	(Z)	



# Water Use in Mineral Industries

## Chapter 8

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## WATER USE IN MINERAL INDUSTRIES

### GENERAL

In the 1963 Census of Mineral Industries, water data were reported for about 19,000 establishments out of the approximately 39,000 establishments included in the census. Information on water use was obtained for establishments reported on the census "long" forms, which include, in general, all establishments with more than four employees.

The number of establishments for which water use was obtained is shown by industry in table 1. The table indicates that of the approximately 19,000 establishments for which water use was shown, only 2,300 used utility water as their principal source of water, except mine water, while 13,200 specified that their principal source was not a utility. Of the 19,000 establishments about 1,200 used 100 million gallons or more of water per year and 1,000 reported using from 20 through 99 million gallons. Table 2 shows the distribution of these same data by State. Of establishments using over 100 million gallons, about 190 were in the East North Central States, 150 in the South Atlantic States and 290 in the West South Central States.

Information on industrial water use was first collected and published for all mineral industries in the 1954 Census of Mineral Industries. At that time, more detailed information on the use of water by mining establishments was obtained. Some such information has since been collected by the Bureau of Mines, U.S. Department of the Interior, for the years 1959 and 1962. The present statistics are intended to furnish a benchmark indicative of the number of water users and the size and kind of their consumption rather than to provide a measure of total water use by the mineral industries.

### DEFINITIONS

Source of water used, referred to as "utility," represents all publicly or privately operated systems whose primary purpose is the supplying of water to the general public. "Other than utility" refers to all other sources of water (except mine water) such as company water systems and joint company water systems, whether their source is surface or ground water. Water use data include both fresh and brackish water, including mine water.

TABLE 1. Water Use in Mineral Industries, by Industry Groups and Industries: 1963

Code	Industry group and industry	Number of establishments reporting water use								
		Total	By source of water <sup>1</sup>			By quantity of water intake <sup>2</sup>				
			Utility	Other than utility	Source not specified	Under 1 million gallons	1 to 9 million gallons	10 to 19 million gallons	20 to 99 million gallons	100 million gallons and over
	All mineral industries.....	18,950	2,297	13,211	3,442	14,887	1,340	464	1,046	1,213
10	Metal mining.....	690	114	409	167	419	42	24	52	153
1011	Iron ores.....	156	46	93	17	60	11	8	21	56
1021	Copper ores.....	85	10	50	25	42	7	3	5	28
1031	Lead and zinc ores.....	89	13	49	27	42	3	5	10	29
	Lead ores subindustry.....	31	4	22	5	20	1	-	1	9
	Zinc ores subindustry.....	58	9	27	22	22	2	5	9	20
104	Gold and silver ores.....	74	9	41	24	54	7	-	2	11
1042	Lode gold.....	42	6	20	16	36	2	-	1	3
1043	Placer gold.....	10	1	5	4	5	2	-	1	2
1044	Silver ores.....	22	2	16	4	13	3	-	-	6
1051	Bauxite.....	14	1	7	6	12	1	1	-	-
106	Ferroalloy ores.....	29	9	10	10	20	3	-	3	3
1062	Manganese ores.....	9	6	1	2	6	2	-	1	-
1064	Tungsten ores and Ferroalloy ores, n.e.c.....	20	3	9	8	14	1	-	2	3
1069										
108	Metal mining services.....	62	5	32	25	55	3	-	-	4
109	Miscellaneous metal ores.....	181	21	127	33	134	7	7	11	22
1092	Mercury ores.....	8	1	3	4	6	-	1	-	1
1093	Titanium ores.....	8	-	8	-	2	-	1	-	5
1094	Uranium-radium-vanadium ores.....	157	18	110	29	121	5	5	11	15
1099	Metallurgical ores, n.e.c.....	8	2	6	-	5	2	-	-	1
11	Anthracite mining.....	281	66	151	64	207	18	10	13	33
1111	Anthracite.....	242	56	130	56	172	16	10	13	31
1112	Anthracite mining services.....	39	10	21	8	35	2	-	-	2
12	Bituminous coal and lignite mining.....	2,589	196	1,561	832	2,160	136	55	114	124
1211	Bituminous coal.....	2,449	186	1,457	806	2,022	134	55	114	124
1212	Lignite.....	22	4	13	5	20	2	-	-	-
1213	Bituminous coal and lignite mining services.....	118	6	91	21	118	-	-	-	-
13	Oil and gas extraction.....	11,053	1,290	8,319	1,444	9,154	723	251	545	380
1311	Crude petroleum and natural gas.....	7,564	638	5,947	979	6,471	399	153	281	260
	Crude petroleum subindustry.....	6,367	548	5,001	818	5,346	366	142	268	245
	Natural gas subindustry.....	1,197	90	946	161	1,125	33	11	13	15
1321	Natural gas liquids.....	652	82	534	36	149	110	66	223	104
138	Oil and gas field services.....	2,837	570	1,838	429	2,534	214	32	41	16
1381	Drilling oil and gas wells.....	1,467	178	1,113	176	1,217	174	27	38	11
1382	Oil and gas exploration services.....	150	39	88	23	134	14	1	-	1
1389	Oil and gas field services, n.e.c.....	1,220	353	637	230	1,183	26	4	3	4
	Survey, log, cement services subindustry.....	117	59	38	20	113	3	-	-	1
	Miscellaneous oil and gas field services subindustry.....	1,103	294	599	210	1,070	23	4	3	3
14	Nonmetallic minerals mining.....	4,337	631	2,771	935	2,947	421	124	322	523
1411	Dimension stone.....	128	16	55	57	107	10	2	2	7
	Dimension limestone subindustry.....	20	1	15	4	14	3	-	1	2
	Dimension granite subindustry.....	42	5	19	18	34	2	2	-	4
	Dimension stone, n.e.c., subindustry.....	66	10	21	35	59	5	-	1	1
1421	Crushed and broken stone.....	1,554	229	1,000	325	1,127	168	46	71	142
	Crushed and broken limestone subindustry.....	1,104	162	724	218	819	114	33	44	94
	Crushed and broken granite subindustry.....	108	15	84	9	59	22	3	11	13
	Crushed and broken stone, n.e.c., subindustry.....	342	52	192	98	249	32	10	16	35
1441	Sand and gravel.....	1,923	271	1,258	394	1,191	202	60	213	257
	Construction sand and gravel subindustry.....	1,782	257	1,147	378	1,107	186	56	202	231
	Glass sand subindustry.....	37	3	31	3	8	6	3	8	12
	Molding sand subindustry.....	57	5	45	7	47	4	1	1	4
	Industrial sand, n.e.c., subindustry.....	47	6	35	6	29	6	-	2	10
145	Clay and related minerals.....	260	45	160	55	194	15	9	10	32
1452	Bentonite.....	30	10	18	2	26	3	-	1	-
1453	Fire clay.....	86	9	45	32	75	1	1	-	9
1454	Fuller's earth.....	15	5	8	2	9	3	-	1	2
1455	Kaolin and ball clay.....	42	4	32	6	29	4	-	3	6
1456	Feldspar.....	18	4	12	2	10	-	-	1	7
1459	Clay and related minerals, n.e.c.....	69	13	45	11	45	4	8	4	8
147	Chemical and fertilizer minerals.....	160	26	117	17	58	12	5	18	67
1472	Barite.....	30	5	22	3	15	2	-	4	9
1473	Fluorspar.....	15	5	7	3	7	-	1	2	5
1474	Potash, soda, borate minerals.....	20	1	18	1	3	4	-	2	11

See footnotes at end of table.

TABLE 1. Water Use in Mineral Industries, by Industry Groups and Industries: 1963—Continued.

Code	Industry group and industry	Number of establishments reporting water use								
		Total	By source of water <sup>1</sup>			By quantity of water intake <sup>2</sup>				
			Utility	Other than utility	Source not specified	Under 1 million gallons	1 to 9 million gallons	10 to 19 million gallons	20 to 99 million gallons	100 millions gallons and over
147	Chemical and fertilizer minerals--Continued									
1475	Phosphate rock.....	55	6	41	8	17	2	1	6	29
1476	Rock salt.....	17	5	12	-	7	2	3	3	2
1477	Sulfur.....	11	4	7	-	1	-	-	-	10
1479	Chemical-fertilizer mining, n.e.c.....	12	-	10	2	8	2	-	1	1
1481	Nonmetallic minerals services.....	92	8	42	42	86	1	-	1	4
149	Miscellaneous minerals, n.e.c.....	220	36	139	45	184	13	2	7	14
1492	Gypsum.....	25	7	12	6	22	1	-	1	1
1493	Mica.....	19	3	12	4	12	3	-	1	3
1494	Native asphalt and bitumens.....	10	-	8	2	8	-	1	-	1
1495	Pumice and pumicite.....	40	4	33	3	40	-	-	-	-
1496	Talc, soapstone, pyrophyllite.....	48	5	38	5	38	4	1	2	3
1497	Natural abrasives, except sand.....	14	3	11	-	13	-	-	-	1
1498	Peat.....	26	6	7	13	25	1	-	-	-
1499	Nonmetallics minerals, n.e.c.....	38	8	18	12	26	4	-	3	5

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Except mine water.<sup>2</sup>Includes mine water used.



TABLE 2. Water Use in the Mineral Industries, by Geographic Areas: 1963

Geographic area	Number of establishments reporting water use								
	Total	By source of water <sup>1</sup>			By quantity of water intake <sup>2</sup>				
		Utility	Other than utility	Source not specified	Under 1 million gallons	1 to 9 million gallons	10 to 19 million gallons	20 to 99 million gallons	100 million gallons and over
United States, total.....	18,950	2,297	13,211	3,442	14,887	1,340	464	1,046	1,213
New England.....	151	29	86	36	103	19	1	21	7
Maine.....	9	2	3	4	8	1	-	-	-
New Hampshire.....	16	-	11	5	10	1	-	3	2
Vermont.....	18	4	9	5	14	4	-	-	-
Massachusetts.....	56	13	34	9	37	7	-	11	1
Rhode Island.....	9	1	6	2	6	-	-	3	-
Connecticut.....	43	9	23	11	28	6	1	4	4
Middle Atlantic.....	1,554	210	974	370	1,159	118	39	101	137
New York.....	255	38	169	48	144	28	18	30	35
New Jersey.....	96	18	58	20	55	17	1	10	13
Pennsylvania.....	1,203	154	747	302	960	73	20	61	89
East North Central.....	2,017	234	1,349	434	1,445	177	52	149	194
Ohio.....	646	75	410	161	485	62	8	38	53
Indiana.....	352	32	254	66	249	33	15	22	33
Illinois.....	604	61	426	117	425	48	20	48	63
Michigan.....	281	44	178	59	187	19	6	30	39
Wisconsin.....	134	22	81	31	99	15	3	11	6
West North Central.....	1,659	175	1,192	292	1,302	114	46	83	114
Minnesota.....	171	31	116	24	103	8	3	11	46
Iowa.....	146	11	103	32	102	9	13	10	12
Missouri.....	231	32	134	65	192	11	5	7	16
North Dakota.....	98	11	75	12	83	5	1	8	1
South Dakota.....	47	1	39	7	38	2	-	4	3
Nebraska.....	193	16	138	39	162	12	3	8	8
Kansas.....	773	73	587	113	622	67	21	35	28
South Atlantic.....	1,865	135	1,193	537	1,455	138	37	84	151
Delaware.....	6	1	3	2	4	1	-	1	-
Maryland.....	78	11	46	21	60	13	-	2	3
Virginia.....	459	28	271	160	407	26	5	6	15
West Virginia.....	895	62	562	271	737	52	19	42	45
North Carolina.....	105	4	81	20	61	13	6	11	14
South Carolina.....	44	3	40	1	24	6	2	5	7
Georgia.....	131	8	85	38	77	17	4	9	24
Florida.....	147	18	105	24	85	10	1	8	43
East South Central.....	1,337	133	865	339	1,084	82	42	44	85
Kentucky.....	762	47	494	221	649	38	21	21	33
Tennessee.....	187	32	109	46	137	20	8	7	15
Alabama.....	175	31	109	35	119	9	10	5	32
Mississippi.....	213	23	153	37	179	15	3	11	5
West South Central.....	7,137	876	5,410	851	5,803	475	174	394	291
Arkansas.....	209	21	142	46	171	11	3	16	8
Louisiana.....	1,148	146	883	119	942	64	28	52	62
Oklahoma.....	1,156	122	888	146	932	82	36	65	41
Texas.....	4,624	587	3,497	540	3,758	318	107	261	180
Mountain.....	1,967	237	1,353	377	1,582	114	43	94	134
Montana.....	177	21	114	42	142	16	2	9	8
Idaho.....	52	5	31	16	38	2	2	-	10
Wyoming.....	370	26	298	46	299	29	10	13	19
Colorado.....	394	56	252	86	342	14	4	20	14
New Mexico.....	618	81	441	96	485	35	20	36	42
Arizona.....	105	18	53	34	79	4	2	5	15
Utah.....	199	25	132	42	155	13	3	8	20
Nevada.....	52	5	32	15	42	1	-	3	6
Pacific.....	1,263	268	789	206	954	103	30	76	100
Washington.....	104	16	60	28	82	6	3	6	7
Oregon.....	94	13	49	32	84	3	-	4	3
California.....	995	230	642	123	736	85	25	62	87
Alaska.....	61	6	35	20	46	9	-	3	3
Hawaii.....	9	3	3	3	6	-	2	1	-

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>Except mine water.<sup>2</sup>Includes mine water used.

**TABLE 3. Employment and Value Added for Establishments Reporting Water Use,  
by Industry Groups and Industries: 1963**

Code	Industry group and industries	All establishments			Establishments reporting water use		
		Total (number)	All employees <sup>1</sup> (number)	Value added (\$1,000)	Total (number)	All employees (number)	Value added (\$1,000)
	All mineral industries.....	38,651	615,572	15,910,015	18,950	518,572	14,655,621
10	Metal mining.....	1,614	77,210	1,418,217	690	71,066	1,407,141
1011	Iron ores.....	208	23,083	549,305	156	20,774	547,595
1021	Copper ores.....	160	26,486	417,089	85	24,413	416,395
1031	Lead and zinc ores.....	205	9,422	84,373	89	8,841	82,485
	Lead ores subindustry.....	125	4,320	34,046	31	3,869	32,785
	Zinc ores subindustry.....	80	5,102	50,327	58	4,972	49,695
104	Gold and silver ores.....	466	4,216	49,026	74	3,779	47,465
1042	Lode gold.....	201	2,397	21,312	42	2,180	20,935
1043	Placer gold.....	158	361	5,810	10	250	5,065
1044	Silver ores.....	107	1,458	21,904	22	1,349	21,465
1051	Bauxite.....	17	552	17,464	14	523	17,325
106	Ferroalloy ores.....	58	3,102	66,407	29	2,990	66,195
1062	Manganese ores.....	17	224	2,348	9	201	2,195
1064 1069	Tungsten ores and Ferroalloy ores, n.e.c.....	41	2,878	64,059	20	2,789	64,005
108	Metal mining services.....	83	2,206	24,736	62	2,130	24,245
109	Miscellaneous metal ores.....	417	8,143	209,817	181	7,616	205,455
1092	Mercury ores.....	49	316	2,569	8	228	1,805
1093	Titanium ores.....	8	997	15,021	8	997	15,021
1094	Uranium-radium-vanadium ores.....	335	6,665	190,629	157	6,240	187,095
1099	Metallic ores, n.e.c.....	25	165	1,598	8	151	1,545
11	Anthracite mining.....	1,069	11,786	120,540	281	10,385	105,145
1111	Anthracite.....	1,026	10,692	110,527	242	9,318	95,225
1112	Anthracite mining services.....	43	1,094	10,013	39	1,067	9,920
12	Bituminous coal and lignite mining.....	6,305	133,862	1,606,688	2,589	117,855	1,501,765
1211	Bituminous coal.....	6,115	132,046	1,578,078	2,449	116,188	1,474,125
1212	Lignite.....	59	512	11,830	22	460	11,415
1213	Bituminous coal and lignite mining services.....	131	1,304	16,780	118	1,207	16,225
13	Oil and gas extraction.....	21,242	271,476	11,019,796	11,053	216,197	10,141,545
1311	Crude petroleum and natural gas.....	14,378	145,244	9,016,372	7,564	104,447	8,379,885
	Crude petroleum subindustry.....	12,326	125,842	7,812,956	6,367	88,684	7,213,375
	Natural gas subindustry.....	2,052	19,402	1,203,416	1,197	15,763	1,166,510
1321	Natural gas liquids.....	652	13,859	762,070	652	13,859	762,070
138	Oil and gas field services.....	6,212	112,373	1,241,354	2,837	97,891	999,595
1381	Drilling oil and gas wells.....	2,836	55,416	653,337	1,467	47,822	586,945
1382	Oil and gas exploration services.....	373	8,683	89,988	150	8,011	83,855
1389	Oil and gas field services n.e.c.....	3,003	48,274	498,029	1,220	42,058	328,795
	Survey, log, cement services subindustry.....	268	11,138	173,821	117	10,731	167,295
	Miscellaneous oil and gas field services subindustry.....	2,735	37,136	324,208	1,103	31,327	161,495
14	Nonmetallic minerals mining.....	8,421	121,238	1,744,774	4,337	103,069	1,500,035
1411	Dimension stone.....	319	2,156	14,842	128	1,539	11,605
	Dimension limestone subindustry.....	61	326	2,947	20	208	2,075
	Dimension granite subindustry.....	66	824	6,513	42	744	5,985
	Dimension stone, n.e.c., subindustry.....	192	1,006	5,382	66	587	3,545
1421	Crushed and broken stone.....	2,256	43,236	581,655	1,554	38,127	541,915
	Crushed and broken limestone subindustry.....	1,612	31,095	408,450	1,104	27,341	377,245
	Crushed and broken granite subindustry.....	150	4,060	61,702	108	3,909	60,295
	Crushed and broken stone, n.e.c. subindustry.....	494	8,081	111,503	342	6,877	104,365
144	Sand and gravel.....	4,616	40,142	513,728	1,923	29,071	321,665
	Construction sand and gravel subindustry.....	4,419	36,394	459,288	1,782	25,715	271,825
	Glass sand subindustry.....	39	1,570	22,649	37	2,161	32,515
	Molding sand subindustry.....	93	927	12,838	57	578	9,075
	Industrial sand, n.e.c., subindustry.....	65	1,251	18,953	47	1,195	17,285
145	Clay and related minerals.....	423	8,316	113,585	260	7,857	111,335
1452	Bentonite.....	44	811	11,435	30	760	11,445
1453	Fire clay.....	155	979	12,640	86	773	11,445
1454	Fullers earth.....	15	758	9,071	15	758	9,071
1455	Kaolin and ball clay.....	48	3,346	49,841	42	3,302	49,645
1456	Feldspar.....	31	461	6,117	18	443	6,075
1459	Clay and related minerals, n.e.c.....	130	1,961	24,481	69	1,821	23,775

See footnotes at end of table.

**TABLE 3. Employment and Value Added for Establishments Reporting Water Use, by Industry Groups and Industries: 1963—Continued**

Code	Industry group and industries	All establishments			Establishments reporting water use		
		Total (number)	All employees <sup>1</sup> (number)	Value added (\$1,000)	Total (number)	All employees (number)	Value added (\$1,000)
147	Chemical and fertilizer minerals.....	235	21,040	433,313	160	20,823	431,284
1472	Barite.....	54	1,434	11,107	30	1,372	10,262
1473	Fluorepar.....	30	804	8,869	15	743	8,226
1474	Potash, soda, borate minerals.....	23	7,050	156,151	20	7,043	156,091
1475	Phosphate rock.....	66	5,624	94,889	55	5,585	94,665
1476	Rock salt.....	25	2,443	49,539	17	2,431	49,424
1477	Sulfur.....	17	2,603	100,349	11	2,593	100,347
1479	Chemical-fertilizer mining, n.e.c.....	20	1,082	12,409	12	1,056	12,269
1481	Nonmetallic minerals services.....	119	871	9,326	92	731	8,684
149	Miscellaneous minerals, n.e.c.....	453	5,477	78,325	220	4,921	73,542
1492	Gypsum.....	37	458	7,753	25	424	7,446
1493	Mica.....	34	398	3,925	19	353	3,612
1494	Native asphalt and bitumens.....	13	422	6,333	10	412	6,289
1495	Pumice and pumicite.....	85	247	4,198	40	229	3,063
1496	Talc, soapstone, pyrophyllite.....	65	1,276	13,746	48	1,213	13,409
1497	Natural abrasives, except sand.....	23	294	4,125	14	249	3,927
1498	Peat.....	109	504	5,626	26	328	4,187
1499	Nonmetallic minerals, n.e.c.....	87	1,878	32,619	38	1,713	31,609

n.e.c. Not elsewhere classified.

<sup>1</sup>Includes figures for employees at separately reported central offices and related facilities. Except as specified, such figures are not included for "establishments reporting water use".

TABLE 4. Employment Size of Establishments Reporting Water Use, by Industry Groups and Industries: 1963

Code	Item	Number of establishments with an average of-							
		Total	0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
	United States, total:								
	All establishments.....	38,651	36,651	1,077	612	222	62	24	3
	Reporting water use.....	18,951	17,039	1,002	601	220	62	24	3
10	Metal mining:								
	All establishments.....	1,614	1,405	60	72	46	17	13	1
	Reporting water use.....	691	482	60	72	46	17	13	1
1011	Iron ores:								
	All establishments.....	208	132	20	32	16	5	3	-
	Reporting water use.....	156	80	20	32	16	5	3	-
1021	Copper ores:								
	All establishments.....	160	125	3	5	11	8	7	1
	Reporting water use.....	85	50	3	5	11	8	7	1
1031	Lead and zinc ores:								
	All establishments.....	205	175	6	12	9	2	1	-
	Reporting water use.....	89	59	6	12	9	2	1	-
	Lead ores subindustry:								
	All establishments.....	125	116	1	5	1	1	1	-
	Reporting water use.....	31	22	1	5	1	1	1	-
	Zinc ores subindustry:								
	All establishments.....	80	59	5	7	8	1	-	-
	Reporting water use.....	58	37	5	7	8	1	-	-
104	Gold and silver ores:								
	All establishments.....	466	455	4	5	1	-	1	-
	Reporting water use.....	74	63	4	5	1	-	1	-
1042	Lode gold:								
	All establishments.....	201	198	1	1	-	-	1	-
	Reporting water use.....	42	39	1	1	-	-	1	-
1043	Placer gold:								
	All establishments.....	158	156	1	1	-	-	-	-
	Reporting water use.....	10	8	1	1	-	-	-	-
1044	Silver ores:								
	All establishments.....	107	101	2	3	1	-	-	-
	Reporting water use.....	22	16	2	3	1	-	-	-
1051	Bauxite:								
	All establishments.....	17	15	-	1	1	-	-	-
	Reporting water use.....	15	13	-	1	1	-	-	-
106	Ferroalloy ores:								
	All establishments.....	58	51	4	1	1	-	1	-
	Reporting water use.....	29	22	4	1	1	-	1	-
1062	Manganese ores:								
	All establishments.....	17	16	1	-	-	-	-	-
	Reporting water use.....	9	8	1	-	-	-	-	-
1064 1069	Tungsten ores and Ferroalloy ores, n.e.c.:								
	All establishments.....	41	35	3	1	1	-	1	-
	Reporting water use.....	20	14	3	1	1	-	1	-
1081	Metal mining services:								
	All establishments.....	83	76	2	2	3	-	-	-
	Reporting water use.....	62	55	2	2	3	-	-	-
109	Miscellaneous metal ores:								
	All establishments.....	417	376	21	14	4	2	-	-
	Reporting water use.....	181	140	21	14	4	2	-	-
1092	Mercury ores:								
	All establishments.....	49	47	1	1	-	-	-	-
	Reporting water use.....	8	6	1	1	-	-	-	-
1093	Titanium ores:								
	All establishments.....	8	3	-	4	1	-	-	-
	Reporting water use.....	8	3	-	4	1	-	-	-
1094	Uranium-radium-vanadium ores:								
	All establishments.....	335	302	19	9	3	2	-	-
	Reporting water use.....	157	124	19	9	3	2	-	-
1099	Metallic ores, n.e.c.:								
	All establishments.....	25	24	1	-	-	-	-	-
	Reporting water use.....	8	7	1	-	-	-	-	-
11	Anthracite mining:								
	All establishments.....	1,069	1,029	27	7	5	-	1	-
	Reporting water use.....	281	241	27	7	5	-	1	-
1111	Anthracite:								
	All establishments.....	1,026	994	20	6	5	-	1	-
	Reporting water use.....	242	210	20	6	5	-	1	-
1112	Anthracite mining services:								
	All establishments.....	43	35	7	1	-	-	-	-
	Reporting water use.....	39	31	7	1	-	-	-	-

See footnotes at end of table.

**TABLE 4. Employment Size of Establishments Reporting Water Use, by Industry Groups  
and Industries: 1963—Continued**

Code	Item	Number of establishments with an average of—							
		Total	0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
12	Bituminous coal and lignite mining:								
	All establishments.....	6,305	5,804	209	191	87	13	1	-
	Reporting water use.....	2,589	2,104	193	191	87	13	1	-
1211	Bituminous coal:								
	All establishments.....	6,115	5,621	202	191	87	13	1	-
	Reporting water use.....	2,449	1,971	186	191	87	13	1	-
1212	Lignite:								
	All establishments.....	59	56	3	-	-	-	-	-
	Reporting water use.....	22	19	3	-	-	-	-	-
1213	Bituminous coal and lignite mining services:								
	All establishments.....	131	127	4	-	-	-	-	-
	Reporting water use.....	118	114	4	-	-	-	-	-
13	Oil and gas extraction:								
	All establishments.....	21,242	20,393	513	243	61	21	9	2
	Reporting water use.....	11,053	10,242	483	237	59	21	9	2
1311	Crude petroleum and natural gas:								
	All establishments.....	14,378	13,994	204	120	41	13	6	-
	Reporting water use.....	7,564	7,193	193	119	40	13	6	-
	Crude petroleum subindustry:								
	All establishments.....	12,326	12,005	171	96	39	9	6	-
	Reporting water use.....	6,367	6,057	161	96	38	9	6	-
	Natural gas subindustry:								
	All establishments.....	2,052	1,989	33	24	2	4	-	-
	Reporting water use.....	1,197	1,136	32	23	2	4	-	-
1321	Natural gas liquids:								
	All establishments.....	652	599	44	9	-	-	-	-
	Reporting water use.....	652	599	44	9	-	-	-	-
138	Oil and gas field services:								
	All establishments.....	6,212	5,800	265	114	20	8	3	2
	Reporting water use.....	2,837	2,450	246	109	19	8	3	2
1381	Drilling oil and gas wells:								
	All establishments.....	2,836	2,573	177	72	11	3	-	-
	Reporting water use.....	1,467	1,221	165	68	10	3	-	-
1382	Oil and gas exploration services:								
	All establishments.....	373	338	13	16	4	2	-	-
	Reporting water use.....	150	116	12	16	4	2	-	-
1389	Oil and gas field services, n.e.c.:								
	All establishments.....	3,003	2,889	75	26	5	3	3	2
	Reporting water use.....	1,220	1,113	69	25	5	3	3	2
	Survey, log, cement services subindustry:								
	All establishments.....	268	259	3	3	-	1	-	2
	Reporting water use.....	117	110	1	3	-	1	-	2
	Miscellaneous oil and gas field services subindustry:								
	All establishments.....	2,735	2,630	72	23	5	2	3	-
	Reporting water use.....	1,103	1,003	68	22	5	2	3	-
14	Nonmetallic minerals mining:								
	All establishments.....	8,421	8,020	268	99	23	11	-	-
	Reporting water use.....	4,337	3,970	239	94	23	11	-	-
1411	Dimension stone:								
	All establishments.....	319	316	2	1	-	-	-	-
	Reporting water use.....	128	126	1	1	-	-	-	-
	Dimension limestone subindustry:								
	All establishments.....	61	61	-	-	-	-	-	-
	Reporting water use.....	20	20	-	-	-	-	-	-
	Dimension granite subindustry:								
	All establishments.....	66	63	2	1	-	-	-	-
	Reporting water use.....	42	40	1	1	-	-	-	-
	Dimension stone, n.e.c., subindustry:								
	All establishments.....	192	192	-	-	-	-	-	-
	Reporting water use.....	66	66	-	-	-	-	-	-
1421	Crushed and broken stone:								
	All establishments.....	2,256	2,088	127	35	5	1	-	-
	Reporting water use.....	1,554	1,399	115	34	5	1	-	-
	Crushed and broken limestone subindustry:								
	All establishments.....	1,612	1,494	92	21	4	1	-	-
	Reporting water use.....	1,104	998	81	20	4	1	-	-
	Crushed and broken granite subindustry:								
	All establishments.....	150	127	18	4	1	-	-	-
	Reporting water use.....	108	85	18	4	1	-	-	-
	Crushed and broken stone, n.e.c., subindustry:								
	All establishments.....	494	467	17	10	-	-	-	-
	Reporting water use.....	342	316	16	10	-	-	-	-

See footnotes at end of table.

**TABLE 4. Employment Size of Establishments Reporting Water Use, by Industry Groups and Industries: 1963—Continued**

Code	Item	Number of establishments with an average of—							
		Total	0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
14	Nonmetallic minerals mining—Continued								
1441	Sand and gravel:								
	All establishments.....	4,616	4,523	73	18	2	-	-	-
	Reporting water use.....	1,923	1,849	58	14	2	-	-	-
	Construction sand and gravel subindustry:								
	All establishments.....	4,419	4,340	63	16	-	-	-	-
	Reporting water use.....	1,782	1,720	50	12	-	-	-	-
	Glass sand subindustry:								
	All establishments.....	39	32	5	1	1	-	-	-
	Reporting water use.....	37	30	5	1	1	-	-	-
	Molding sand subindustry:								
	All establishments.....	93	91	2	-	-	-	-	-
	Reporting water use.....	57	56	1	-	-	-	-	-
	Industrial sand, n.e.c., subindustry:								
	All establishments.....	65	60	3	1	1	-	-	-
	Reporting water use.....	47	43	2	1	1	-	-	-
145	Clay and related minerals:								
	All establishments.....	423	394	17	7	4	1	-	-
	Reporting water use.....	260	232	16	7	4	1	-	-
1452	Bentonite:								
	All establishments.....	44	41	3	-	-	-	-	-
	Reporting water use.....	30	27	3	-	-	-	-	-
1453	Fire clay:								
	All establishments.....	155	154	1	-	-	-	-	-
	Reporting water use.....	86	85	1	-	-	-	-	-
1454	Fuller's earth:								
	All establishments.....	15	10	3	1	1	-	-	-
	Reporting water use.....	15	10	3	1	1	-	-	-
1455	Kaolin and ball clay:								
	All establishments.....	48	35	5	4	3	1	-	-
	Reporting water use.....	42	29	5	4	3	1	-	-
1456	Feldspar:								
	All establishments.....	31	30	1	-	-	-	-	-
	Reporting water use.....	18	17	1	-	-	-	-	-
1459	Clay and related minerals, n.e.c.:								
	All establishments.....	130	124	4	2	-	-	-	-
	Reporting water use.....	69	64	3	2	-	-	-	-
147	Chemical and fertilizer minerals:								
	All establishments.....	235	154	32	30	11	8	-	-
	Reporting water use.....	160	79	32	30	11	8	-	-
1472	Barite:								
	All establishments.....	54	47	5	2	-	-	-	-
	Reporting water use.....	30	23	5	2	-	-	-	-
1473	Fluorspar:								
	All establishments.....	30	26	2	2	-	-	-	-
	Reporting water use.....	15	11	2	2	-	-	-	-
1474	Potash, soda, borate minerals:								
	All establishments.....	23	8	4	2	4	5	-	-
	Reporting water use.....	20	5	4	2	4	5	-	-
1475	Phosphate rock:								
	All establishments.....	66	37	13	11	4	1	-	-
	Reporting water use.....	55	26	13	11	4	1	-	-
1476	Rock salt:								
	All establishments.....	25	13	4	6	2	-	-	-
	Reporting water use.....	17	5	4	6	2	-	-	-
1477	Sulfur:								
	All establishments.....	17	7	1	7	1	1	-	-
	Reporting water use.....	11	1	1	7	1	1	-	-
1479	Chemical-fertilizer mining, n.e.c.:								
	All establishments.....	20	16	3	-	-	1	-	-
	Reporting water use.....	12	8	3	-	-	1	-	-
1481	Nonmetallic minerals services:								
	All establishments.....	119	116	3	-	-	-	-	-
	Reporting water use.....	92	89	3	-	-	-	-	-
149	Miscellaneous minerals, n.e.c.:								
	All establishments.....	453	429	14	8	1	1	-	-
	Reporting water use.....	220	196	14	8	1	1	-	-
1492	Gypsum:								
	All establishments.....	37	35	2	-	-	-	-	-
	Reporting water use.....	25	23	2	-	-	-	-	-
1493	Mica:								
	All establishments.....	34	32	2	-	-	-	-	-
	Reporting water use.....	19	17	2	-	-	-	-	-
1494	Native asphalt and bitumens:								
	All establishments.....	13	10	2	1	-	-	-	-
	Reporting water use.....	10	7	2	1	-	-	-	-
1495	Pumice and pumicite:								
	All establishments.....	85	85	-	-	-	-	-	-
	Reporting water use.....	40	40	-	-	-	-	-	-

**TABLE 4. Employment Size of Establishments Reporting Water Use, by Industry Groups and Industries: 1963—Continued**

Code	Item	Number of establishments with an average of—							
		Total	0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
14	Nonmetallic minerals mining—Continued								
149	Miscellaneous minerals, n.e.c.—Continued								
1496	Talc, soapstone, pyrophyllite:								
	All establishments.....	65	58	4	2	1	-	-	-
	Reporting water use.....	48	41	4	2	1	-	-	-
1497	Natural abrasives:								
	All establishments.....	23	22	-	1	-	-	-	-
	Reporting water use.....	14	13	-	1	-	-	-	-
1498	Peat:								
	All establishments.....	109	107	2	-	-	-	-	-
	Reporting water use.....	26	24	2	-	-	-	-	-
1499	Nonmetallics minerals, n.e.c.:								
	All establishments.....	87	80	2	4	-	1	-	-
	Reporting water use.....	38	31	2	4	-	1	-	-

Standard Notes: - Represents zero.  
n.e.c. Not elsewhere classified.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

# **Summary and Industry Statistics**





## METAL MINING

This report shows 1963 Census of Mineral Industries statistics for establishments classified in Major Group 10, Metal Mining. The separate industries included in this major group and the reports in which they appear are as follows:

SIC Code and Industry Title	Report
1011—Iron Ores	MIC63(1)-10B
1021—Copper Ores	
1031—Lead and Zinc Ores	MIC63(1)-10C
1042—Lode Gold	
1043—Placer Gold	
1044—Silver Ores	
1051—Bauxite	MIC63(1)-10D
1062—Manganese Ores	
1064—Tungsten Ores	
1069—Ferroalloy Ores (except Vanadium), Not Elsewhere Classified	
1081—Metal Mining Services	MIC63(1)-10E
1092—Mercury Ores	
1093—Titanium Ores	
1094—Uranium-Radium-Vanadium Ores	
1099—Metallic Ores, Not Elsewhere Classified	

In addition to the industries listed above, separate subindustry figures are presented for the Lead Ores and Zinc Ores subindustries and for service subindustries in which establishments are classified on the basis of the primary industry served.

### INDUSTRY DESCRIPTIONS

The metal mining industries represent establishments primarily engaged in mining, developing mines, or exploring for metallic ores. These ores are valued chiefly for the metals they contain, recovered either for use as such or as constituents of alloys, chemicals, pigments, etc. This major group also includes all ore dressing and beneficiating operations whether performed at mills operated in conjunction with the mines served, or at mills, such as custom mills, operated separately. These mills include those which crush, grind, wash, dry, sinter, or leach ore, or perform gravity separation or flotation operations. Magnesite and brucite operations are classified in Industry 1459, and dolomite operations in Industry 1421. Smelters and refineries are classified in Major Group 33 — Primary Metal Industries, and establishments engaged in producing primary magnesium metal in Industry 3339. The operation of brine wells for the production of magnesium is classified in Major Group 28.

Exploration for metal ores by operators of the properties is included in this major group and establishments engaged only in such activities are classified according to type of ore expected to be found. Establishments primarily performing exploration on a contract, fee, or other basis are included in the metal mining services industry and classified by subindustry on the basis of the type of metal ore expected to be found.

## SUMMARY OF FINDINGS

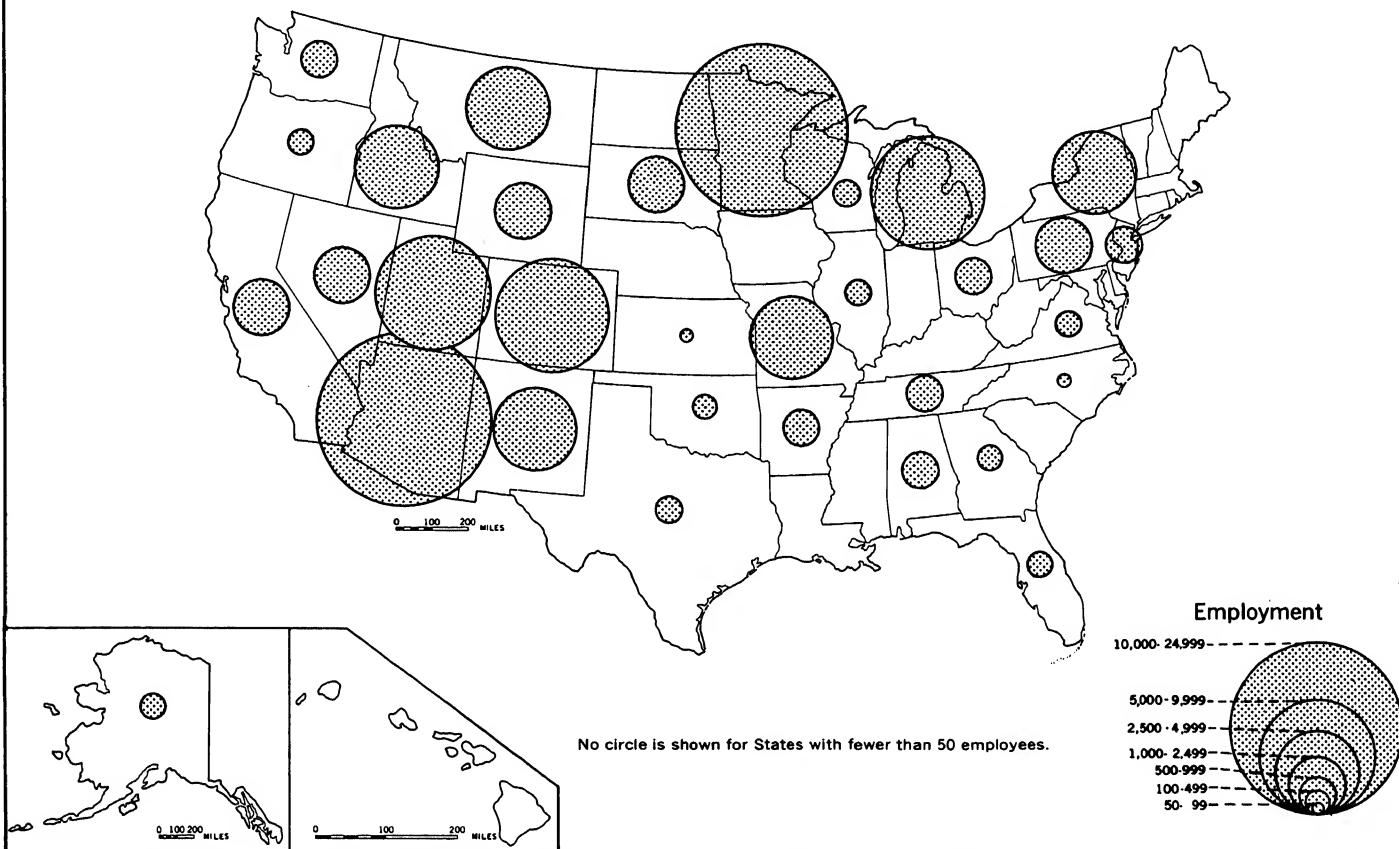
The combined value of shipments and receipts in 1963 of all industries in Major Group 10 was \$2,128 million. Establishments in the Iron Ores Industry accounted for \$762 million, the Copper Ores Industry for \$670 million, and the Uranium-Radium-Vanadium Ores Industry for \$326 million. These three industries accounted for more than 80 percent of the total value of shipments for the major group. Shipments of the Lead and Zinc Ores Industry amounted to \$136 million, with the Lead Ores Subindustry accounting for \$51 million and the Zinc Ores Subindustry for \$85 million. The Gold and Silver Ores Industries had shipments and receipts of \$60 million, with \$27 million for the Lode Gold Industry, \$8 million for the Placer Gold Industry, and \$26 million for the Silver Ores Industry. The Ferroalloy Ores Industry Group accounted for \$91 million, with the Manganese Ores Industry accounting for \$7 million, and the Tungsten Ores and Ferroalloy Ores, N.E.C., Industries for \$83 million. The Bauxite Industry accounted for \$21 million, the Titanium Ores Industry for \$22 million, the Mercury Ores Industry for \$4 million and the Metallic Ores, N.E.C., Industry for \$3 million. Establishments primarily engaged in metal mining services reported receipts of \$32 million.

These figures represent the gross value of shipments and receipts. Some of them contain duplication because of the inclusion of the value of minerals transferred from one establishment to other establishments in the same industry for treatment and the inclusion of some purchases for resale. In order to eliminate this duplication, net shipments and receipts figures have been derived for each industry by subtracting from the gross shipments either the value of shipments of ores to treatment plants or, if the latter figure was not available, the cost of minerals received from other establishments for treatment. In these net shipments, the value of shipments of products which had been purchased for resale was also subtracted. For the metal mining industries as a whole, net shipments and receipts amounted to \$1,836 million. Net shipments and receipts for some of the major metal mining industry groups in 1963 were: Iron Ores, \$709 million; Copper Ores, \$544 million; Lead and Zinc Ores, \$120 million; and Miscellaneous Metal Ores, \$266 million.

This report presents, in table 1, comparative general statistics for all metal mining industries combined for the census years 1860 to 1963. Table 2A presents general statistics by 3-digit industry groups for the United States and for geographic divisions and States. Table 2B shows some cost, capital, and product details for major metal mining divisions and States. Table 2C shows number of establishments, employment, and value added in mining by major types of operation for the same geographic areas. In table 3, detailed statistics are presented for the United States by 4-digit industries and subindustries. Table 4 shows selected statistics for establishments classified by employment size for all metal mining and for 3-digit industry groups and includes the number of metal mining establishments by employment size and State.

# METAL MINING

Distribution of Employment by State: 1963



Employment: 1840-1963

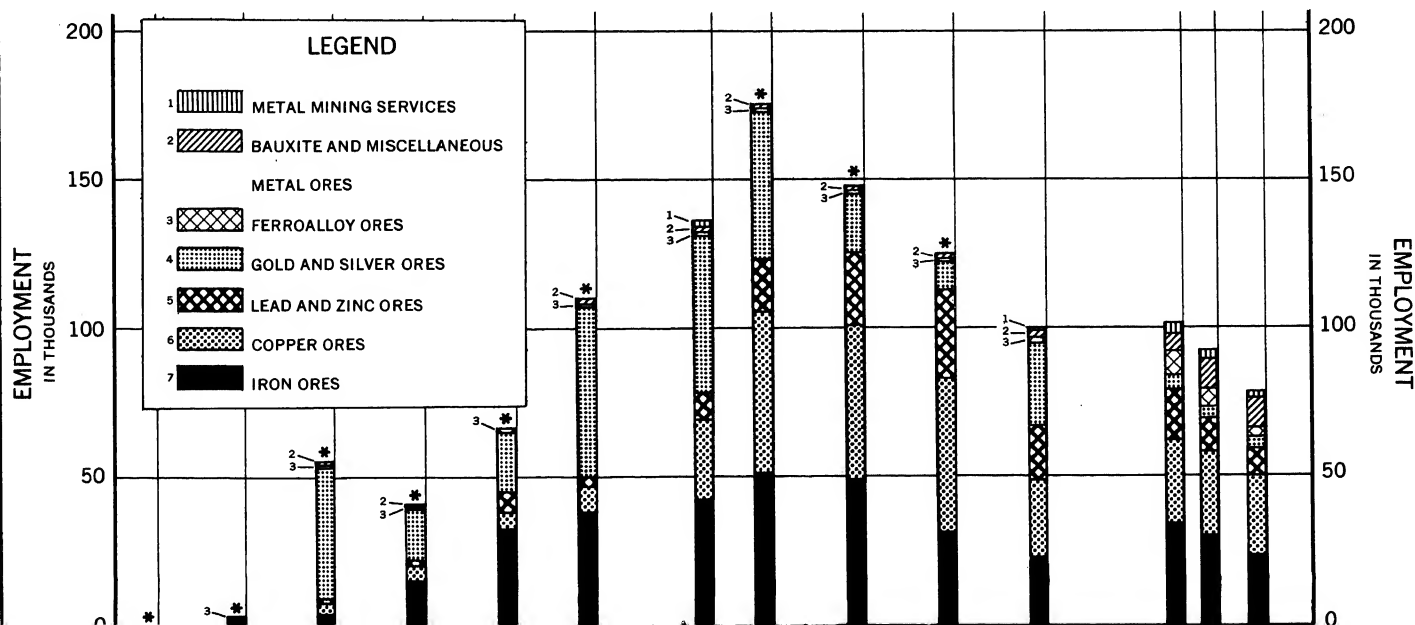




TABLE 1. General Statistics: 1963 and Earlier Years

Year	Operating companies (number)	Establishments (number)		All employees			Production, development, and exploration workers			Selected expenses (\$1,000)				Value of shipments and receipts (\$1,000)	Value of net shipments and receipts <sup>1</sup> (\$1,000)	Capital expenditures (\$1,000)	Energy used—kwh. equivalent (million kwh.)	Horsepower rating of power equipment (1,000)
		Total	With 70 employees or more	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours	Wages (\$1,000)	Value added in mining (\$1,000)	Supplies, purchases for resale, and fuels and electric energy	Minerals received for treatment	Contract work	Purchased machinery installed					
1963..	1,308	1,614	298	77,210	515,207	62,182	125,663	383,671	1,418,217	421,959	311,733	110,801	96,480	2,128,246	1,835,665	230,944	31,911	6,115
1968..	2,024	2,351	386	91,582	486,192	70,750	136,242	355,031	1,180,216	354,910	303,251	132,912	70,004	1,826,160	1,561,506	215,133	27,800	(NA)
1969..	1,727	2,068	416	101,210	468,735	82,715	170,497	358,002	1,084,142	292,674	216,922	117,173	87,454	2,137,320	1,872,117	222,428	21,677	5,236
1969..	1,886	2,095	(NA)	100,135	153,917	89,791	190,835	127,111	416,956	97,805	(NA)	2,616	(NA)	(NA)	517,377	(NA)	14,628	2,264
1969..	1,799	1,799	(NA)	125,577	205,803	115,775	(NA)	178,319	496,335	130,024	(NA)	7,462	25,391	(NA)	633,821	(NA)	624,727	1,736
1969..	(NA)	2,739	(NA)	149,058	238,741	138,177	(NA)	213,856	413,078	140,360	6,609	6,378	(NA)	566,425	559,816	(NA)	833,978	1,408
1969..	1,671	7,834	(NA)	175,387	156,794	164,918	(NA)	142,019	266,717	93,801	18,996	10,243	(NA)	389,757	370,761	(NA)	(NA)	1,163
1969..	1,460	4,730	(NA)	133,828	108,659	121,232	(NA)	96,207	167,525	45,082	(NA)	3,142	(NA)	(NA)	215,749	(NA)	(NA)	559
1969..	(NA)	(NA)	(NA)	109,136	64,375	103,032	(NA)	58,368	131,055	123,310	(NA)	133,375	(NA)	(NA)	157,740	(NA)	(NA)	171
1969..	(NA)	4,048	(NA)	65,866	28,327	62,597	(NA)	(NA)	141,037	159,315	(NA)	(NA)	(NA)	(NA)	115,135	(NA)	(NA)	73
1970..	(NA)	2,969	(NA)	39,907	19,547	(NA)	(NA)	(NA)	41,183	6,042	(NA)	(NA)	(NA)	(NA)	47,225	(NA)	(NA)	22
1970..	(NA)	7,462	(NA)	53,576	26,681	(NA)	(NA)	(NA)	36,776	17,819	(NA)	(NA)	(NA)	54,595	(NA)	(NA)	(NA)	(NA)

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>Represents gross shipments and receipts less minerals transferred to other establishments for treatment, or less minerals received from other establishments for treatment, and less resales of products purchased for resale without further processing.

<sup>2</sup>Excludes figures for the Uranium-Radium-Vanadium Ores Industry.

<sup>3</sup>Excludes figures for Alaska.

<sup>4</sup>Represents number of mines.

<sup>5</sup>Excludes number of establishments.

<sup>6</sup>Except for data for nonproducing establishments.

<sup>7</sup>Except for number of establishments, excludes figures for 1 chromite mine in Alaska.

<sup>8</sup>Includes purchased electric energy. For 1929, the quantity of purchased electric energy amounted to 8 percent of the total kwh equivalent of energy used.

<sup>9</sup>Except for number of operating companies and number of establishments, includes data for 2 producing and 18 nonproducing establishments in the nonmetallic minerals mining industries, for which separate figures were not available.

<sup>10</sup>Represents the sum of the number of operating companies in individual industries or available groups of industries. Probably includes some duplication due to the same company operating in more than one industry.

<sup>11</sup>For 1902, data were obtained from the operators of metal mines on the average number of employees at contract service operations performed for them. The total number of such employees was reported as 8,527.

<sup>12</sup>Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.

<sup>13</sup>Includes data for the Manganese Ores Industry.

<sup>14</sup>Includes an estimated value added for the Placer Gold Industry.

<sup>15</sup>Excludes costs for the Placer Gold Industry.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958

Code	Industry group and geographic area	1963										1958		
		Establishments, number		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc. and purchased machinery	Value of shipments and receipts	Capital expenditures	All employees, number	Value added in mining
		Total	With 20 or more employees	Number	Payroll (\$1,000)	Number	Man-hours (1,000)	Wages (\$1,000)						
	United States, total.....	1,614	298	77,210	515,207	62,182	125,663	383,671	1,418,217	940,973	2,128,246	230,944	91,582	1,180,216
101	Iron ores.....	208	101	23,083	161,571	18,102	34,524	112,781	549,305	309,573	762,234	96,644	30,113	487,667
102	Copper ores.....	160	41	26,486	187,307	21,372	45,319	142,395	417,089	340,162	670,173	87,078	27,648	266,485
103	Lead and zinc ores.....	205	46	9,422	49,337	7,822	14,781	37,935	84,373	63,488	135,965	11,896	11,227	173,679
104	Gold and silver ores.....	466	15	4,216	24,797	3,585	7,605	20,019	49,026	18,384	60,224	7,186	24,415	242,146
105	Bauxite.....	17	4	552	3,442	414	751	2,285	17,464	4,296	21,491	269	705	15,430
106	Ferroalloy ores.....	58	11	3,102	20,365	2,627	4,867	15,231	66,407	30,128	90,704	5,831	15,438	174,255
108	Metal mining services	83	17	2,206	13,923	1,891	4,018	11,485	24,736	10,663	32,360	3,039	2,184	22,862
109	Miscellaneous metal ores.....	417	63	8,143	54,465	6,369	13,798	41,540	209,817	164,279	355,095	19,001	19,790	196,488
GEOGRAPHIC AREA														
101	Middle Atlantic	24	17	35,948	340,837	4,313	8,210	25,779	76,805	36,868	108,240	5,433	6,152	51,821
	Iron ores.....	13	9	3,387	21,859	2,982	5,624	18,386	55,598	21,062	74,045	2,615	3,483	33,160
101	New York.....	8	7	3,153	23,881	1,909	3,601	12,166	36,254	17,001	49,751	3,504	3,281	32,553
	Iron ores.....	4	3	1,267	8,710	1,135	2,089	7,500	21,158	7,080	26,464	1,774	1,037	16,390
	New Jersey.....	7	4	737	4,168	624	1,210	3,348	9,237	2,089	10,597	729	1,029	8,667
	Pennsylvania.....	9	6	2,058	12,788	1,780	3,399	10,265	31,314	17,778	47,892	1,200	1,842	10,601
101	East North Central....	49	34	7,646	51,991	6,005	11,611	35,871	109,299	125,842	177,841	57,300	10,026	87,682
102	Iron ores.....	26	20	4,736	35,629	3,554	6,655	22,954	87,718	92,130	125,638	54,210	(NA)	(NA)
103	Copper, lead, and zinc ores.....	20	13	2,853	15,982	2,412	4,870	12,702	21,046	32,311	50,271	3,086	2,807	17,664
	Michigan.....	32	27	6,681	42,083	5,474	10,626	33,103	99,651	112,946	155,841	56,756	8,291	78,991
	Wisconsin.....	11	4				279	478	1,430	5,452	7,279	325	1,199	6,931
101	West North Central....	139	56	15,927	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	20,481	(D)
108	Iron ores.....	81	48	11,974	85,308	9,001	17,165	55,967	344,110	167,854	477,902	34,062	(NA)	(NA)
	Metal mining services.....	15	2	299	1,508	260	486	1,266	2,880	924	3,497	307	159	1,437
101	Minnesota.....	77	48	11,434	81,763	8,515	16,217	52,901	350,804	150,233	477,894	23,143	15,166	292,231
108	Iron ores.....	72	46	11,161	80,334	8,279	15,769	51,709	348,090	149,384	474,619	22,855	15,048	291,127
	Metal mining services.....	5	2	273	1,429	236	448	1,192	2,726	849	3,287	288	118	1,104
103	Missouri.....	24	5	2,502	11,838	2,064	3,269	9,001	49,617	423,592	420,012	413,202	3,259	20,958
	Lead and zinc ores.....	5	3	1,651	6,748	1,306	1,815	4,632	13,026	4,755	15,927	1,854	2,852	17,725
	Kansas.....	6	-	52	198	44	84	165	(4)	(4)	(4)	(4)	54	204
101	South Atlantic.....	36	10	1,093	5,512	880	1,790	3,942	13,897	8,143	20,663	1,377	1,759	12,944
109	Iron ores.....	15	2	122	424	110	214	389	1,306	1,727	2,656	377	(NA)	(NA)
	Miscellaneous metal ores.....	6	5	490	2,808	377	766	1,883	8,095	3,680	11,179	596	665	6,989
	Virginia.....	5	3	396	1,851	318	615	1,309	4,401	2,661	6,677	385	595	3,525
	Georgia.....	19	2	126	451	107	201	362	1,395	870	1,919	346	(D)	(D)
101	East South Central....	45	19	1,912	10,597	1,642	3,472	8,668	21,419	11,037	29,675	2,781	3,755	48,656
103	Iron ores.....	29	10	926	5,127	814	1,723	4,246	11,019	3,823	14,451	391	(NA)	(NA)
	Lead and zinc ores.	9	8	914	5,125	766	1,622	4,127	9,564	6,606	13,855	2,315	844	(NA)
103	Tennessee.....	13	9	942	5,280	794	1,688	4,281	9,952	6,740	14,375	2,317	1,053	5,394
	Lead and zinc ores.....	9	8	914	5,125	766	1,622	4,127	9,564	6,606	13,855	2,315	844	(NA)
	Alabama.....	32	10	980	5,317	848	1,784	4,386	11,467	4,287	15,300	464	2,702	43,133
101	West South Central....	56	11	1,233	(D)	970	(D)	(D)	(D)	(D)	(D)	(D)	1,501	(D)
105	Iron ores.....	5	3	328	1,464	280	413	1,184	4,375	1,947	6,155	167	(NA)	(NA)
	Bauxite.....	8	4	489	3,151	368	671	2,101	16,725	3,615	20,147	193	632	15,023
105	Arkansas.....	15	5	543	(D)	414	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	Bauxite.....	8	4	489	3,151	368	671	2,101	16,725	3,615	20,147	193	632	15,023
	Oklahoma.....	22	2	269	(D)	197	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
	Texas.....	19	4	421	(D)	359	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
101	Mountain.....	919	135	40,864	276,998	33,885	71,074	219,756	748,358	540,171	1,170,768	117,761	44,680	570,738
	Iron ores.....	30	8	1,085	7,459	865	1,651	5,565	25,328	10,936	35,043	1,221	938	27,731

See footnotes at end of table.

TABLE 2A. **General Statistics by Industry Group and Geographic Area: 1963 and 1958—Con.**

Code	Industry group and geographic area	1963											1958	
		Establishments, number		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc. and purchased machinery	Value of shipments and receipts	Capital expenditures	All employees, number	Value added in mining
		Total	With 20 or more employees	Number	Payroll (\$1,000)	Number	Man-hours (1,000)	Wages (\$1,000)						
	GEOGRAPHIC AREA--Con.													
102	Mountain--Continued													
103	Copper, lead, zinc, gold, and silver ores.....	488	63	29,265	198,590	24,593	51,687	159,946	464,019	358,725	728,551	94,193	30,597	304,824
104	Ferroalloy ores, except vanadium..	33	4	2,303	15,549	1,928	3,476	11,147	74,921	26,883	94,791	7,013	(NA)	(NA)
106	Metal mining services.....	45	11	17706	11,238	1,482	3,224	9,456					1,341	15,329
108	Miscellaneous metal ores.....	323	49	6,505	44,162	5,017	11,036	33,642	184,090	143,627	312,383	15,334	(NA)	(NA)
109	Montana.....	80	7	4,296	27,106	3,544	7,045	20,403	28,357	88,244	82,172	34,429	5,356	34,330
102	Copper ores.....	13	3	3,571	23,420	2,915	5,900	17,389	23,482	81,212	71,040	33,654	3,685	20,413
103	Lead and zinc ores.....	13	2	537	2,885	489	863	2,404	3,664	5,996	9,588	72	596	4,191
106	Ferroalloy ores, except vanadium	8	1	68	300	43	91	181	450	484	(D)	(D)	(NA)	(NA)
103	Idaho.....	85	10	2,771	16,076	2,352	4,626	12,950	31,357	11,808	39,335	3,830	3,372	30,255
104	Lead and zinc ores.....	29	4	1,726	9,870	1,466	2,954	7,939	14,115	5,215	18,486	924	1,946	11,701
104	Gold and silver ores.....	37	5	988	5,939	843	1,599	4,825	17,124	4,637	20,573	1,188	907	9,606
101	Wyoming.....	45	18	1,794	12,944	1,394	3,272	9,875	51,499	31,753	79,405	3,847	940	21,564
104	Iron ores.....	4	2	621	4,304	478	887	2,979	11,423	6,270	17,298	395	(NA)	(NA)
109	Colorado.....	235	20	5,021	30,437	4,208	7,954	23,002	94,725	53,667	141,595	6,847	5,763	70,130
104	Gold and silver ores.....	51	1	108	484	87	177	412	1,105	576	1,226	455	229	1,867
109	Miscellaneous metal ores.....	131	13	1,747	10,125	1,393	2,840	7,705	30,081	33,794	60,984	2,891	(NA)	(NA)
101	New Mexico.....	66	18	4,182	(5)	3,129	(5)	(5)	(5)	(5)	(5)	(5)	4,206	82,423
102	Arizona.....	151	29	14,201	103,066	11,944	27,044	85,228	277,149	135,878	373,010	40,017	14,682	185,566
103	Copper ores.....	65	19	12,507	92,316	10,451	23,893	76,140	257,765	123,186	345,066	35,885	13,072	165,569
108	Lead and zinc ores.....	18	1	69	410	65	104	399	(6)	578	340	210	416	4,077
108	Metal mining services.....	8	3	1,029	6,882	918	1,953	5,936	12,210	5,640	15,578	2,272	278	3,789
101	Utah.....	150	22	6,464	573,849	5,503	517,289	557,047	5237,123	5188,602	5400,614	525,111	(NA)	(NA)
103	Iron ores.....	6	3	283	1,470	225	404	1,515	11,116	2,655	13,508	263	485	22,185
103	Lead and zinc ores.....	22	6	1,094	6,448	908	1,883	5,056	11,962	14,426	22,859	3,529	1,145	9,557
101	Nevada.....	107	11	2,135	13,520	1,811	3,844	11,251	28,098	30,219	54,637	3,680	(NA)	(NA)
104	Iron ores.....	10	3	166	1,122	150	341	1,023	2,586	1,923	3,989	520	160	2,496
104	Gold and silver ores.....	55	2	234	1,300	202	451	1,187	1,494	2,206	2,262	1,438	195	1,946
101	Pacific.....	342	15	2,535	17,877	2,135	4,506	13,654	45,923	23,261	61,200	7,984	3,176	52,660
102	Iron ores.....	9	1	525	4,301	496	1,079	4,090	19,851	10,094	26,344	3,601	356	15,928
103	Copper, lead, zinc, gold, and silver ores.....	260	7	1,116	7,818	874	1,830	4,794	11,772	6,561	15,603	2,730	71,501	713,868
104	Ferroalloy ores, except vanadium..	15	3	510	3,167	468	913	2,966	6,214	4,382	9,386	1,210	1487	110,888
106	Miscellaneous metal ores.....	50	4	372	2,548	289	662	1,764	7,979	2,195	9,742	432	1686	19,804
109	Oregon.....	25	1	122	736	104	205	598	(D)	1,004	(D)	950	265	(D)
102	California:													
103	Copper, lead, zinc, gold, and silver ores....	127	2	381	3,238	250	543	1,224	3,108	1,596	3,820	884	561	4,263
104	Miscellaneous metal ores.....	33	2	258	1,643	209	475	1,121	2,341	1,151	3,226	266	420	3,973
109	Alaska.....	85	2	297	2,023	250	555	1,588	5,197	1,892	6,412	677	548	5,448

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Excludes figures for Alaska.

<sup>2</sup>Excludes figures for lode gold in Alaska.

<sup>3</sup>Includes figures for separately reported central offices and related facilities in Massachusetts.

<sup>4</sup>Figures for Kansas are included with those for Missouri.

<sup>5</sup>Figures for New Mexico are included with those for Utah.



**TABLE 2B. Selected Expenditures, Crude Ore Mined, and Value of Net Shipments for  
Selected Industry Groups and Geographic Areas: 1963**

(For explanation of column captions see Introduction)

Ind. code	Industry group and geographic area	Selected expenses (\$1,000)					Capital expenditures (\$1,000)			Crude ore mined  (1,000 short tons)	Value of net shipments of primary products <sup>2</sup>  (\$1,000)
		Total	Supplies, purchases for resale, and purchased fuels and electric energy	Minerals received for treatment	Contract work	Purchased machinery installed	Total	Development and exploration of mineral property	Plant, other construction, machinery, and equipment <sup>1</sup>		
	United States, total.....	940,973	421,959	311,733	110,801	96,480	230,944	65,068	165,876	(X)	(X)
101	Iron ores.....	309,573	161,558	64,616	55,510	27,889	96,644	23,251	73,393	170,804	<sup>3</sup> 706,468
102	Copper ores.....	340,162	134,242	129,793	30,537	43,590	87,078	23,145	63,933	<sup>4</sup> 145,312	522,122
103	Lead and zinc ores.....	63,488	29,515	26,113	3,588	4,272	11,896	6,919	4,977	14,154	109,684
104	Gold and silver ores.....	18,384	<sup>5</sup> 14,561	( <sup>5</sup> )	1,798	2,025	7,186	4,513	2,673	<sup>6</sup> 3,430	57,018
105	Bauxite.....	4,296	1,132	1,474	1,228	462	269	30	239	2,087	20,478
106	Ferroalloy ores.....	30,128	<sup>5</sup> 24,993	( <sup>5</sup> )	3,682	1,453	5,831	2,363	3,468	<sup>7</sup> 62	<sup>8</sup> 83,719
108	Metal mining services.....	10,663	6,486	(X)	393	3,784	3,039	(X)	3,039	(X)	30,989
109	Miscellaneous metal ores.....	164,279	56,946	82,263	14,065	11,005	19,001	4,847	14,154	<sup>9</sup> 6,502	260,609
	Geographic Area										
101	Middle Atlantic.....	36,868	21,086	10,660	1,272	3,850	5,433	2,147	3,286	(X)	(X)
	Iron ores.....	21,062	<sup>5</sup> 19,469	( <sup>5</sup> )	19	1,574	2,615	1,791	824	10,319	<sup>3</sup> 74,424
101	New York.....	17,001	11,582	2,500	1,272	1,647	3,504	1,612	1,892	(X)	(X)
	Iron ores.....	7,080	6,821	-	19	240	1,774	1,352	422	5,864	<sup>3</sup> 29,376
	New Jersey.....	2,089	1,693	-	-	396	729	296	433	(X)	(X)
	Pennsylvania.....	17,778	7,811	8,160	-	1,807	1,200	239	961	(X)	(X)
101	East North Central.....	125,842	46,261	26,209	44,671	8,701	57,300	7,411	49,889	(X)	(X)
102	Iron ores.....	92,130	<sup>5</sup> 40,747	( <sup>5</sup> )	43,626	7,757	54,210	5,419	48,791	(D)	(D)
103	Copper, lead, and zinc ores.....	32,311	<sup>5</sup> 30,342	( <sup>5</sup> )	1,031	938	3,086	1,992	1,094	9,924	35,457
	Michigan.....	112,946	<sup>5</sup> 59,730	( <sup>5</sup> )	44,642	8,574	56,756	7,373	49,383	(X)	(X)
	Wisconsin.....	2,152	<sup>5</sup> 2,014	( <sup>5</sup> )	11	127	325	38	287	(X)	(X)
101	West North Central:										
	Iron ores.....	167,854	<sup>5</sup> 145,380	( <sup>5</sup> )	8,816	13,658	34,062	15,598	18,464	<sup>10</sup> 135,250	(D)
101	Minnesota.....	150,233	91,019	46,558	3,931	8,725	23,143	8,760	14,383	(X)	(X)
	Iron ores.....	149,384	90,451	46,558	3,929	8,446	22,855	8,760	14,095	115,211	435,074
103	Missouri:										
	Lead and zinc ores.....	4,755	3,140	-	1,358	257	1,854	1,602	252	3,347	(D)
109	South Atlantic.....	8,143	3,869	2,387	573	1,314	1,377	131	1,246	(X)	(X)
	Miscellaneous metal ores.....	3,680	<sup>2</sup> 2,748	( <sup>5</sup> )	286	646	596	-	596	(X)	(X)
	Virginia.....	2,661	<sup>5</sup> 2,157	( <sup>5</sup> )	189	315	385	78	307	(X)	(X)
101	East South Central.....	11,037	6,510	2,366	887	1,274	2,781	1,151	1,630	(X)	(X)
103	Iron ores.....	3,823	3,151	-	336	336	391	65	326	<sup>11</sup> 7,207	(D)
	Lead and zinc ores.....	6,606	<sup>5</sup> 5,218	( <sup>5</sup> )	516	872	2,315	1,086	1,229	2,820	(D)
103	Tennessee.....	6,740	<sup>5</sup> 5,346	( <sup>5</sup> )	522	872	2,317	1,086	1,231	(X)	(X)
	Lead and zinc ores.....	6,606	<sup>5</sup> 5,218	( <sup>5</sup> )	516	872	2,315	1,086	1,229	(NA)	(NA)
	Alabama.....	4,297	<sup>5</sup> 3,530	( <sup>5</sup> )	365	402	464	65	399	(X)	(X)
101	West South Central:										
105	Iron ores.....	1,947	<sup>5</sup> 1,101	( <sup>5</sup> )	677	169	167	-	167	3,354	(D)
	Bauxite.....	3,615	899	1,158	1,162	396	193	28	165	(D)	(D)
105	Arkansas:										
	Bauxite.....	3,615	899	1,158	1,162	396	193	28	165	(D)	(D)
101	Mountain.....	540,171	216,232	214,694	47,845	61,400	117,761	34,015	83,746	(X)	(X)
102	Iron ores.....	10,936	8,979	-	1,360	597	1,221	187	1,034	7,660	<sup>13</sup> 35,043
103	Copper, lead, zinc, gold, and silver ores.....	358,725	140,652	138,275	31,667	48,131	94,193	27,540	66,653	141,164	585,683
106	Ferroalloy ores.....	26,883	18,715	1	3,896	4,271	7,013	2,137	4,876	(X)	(X)
108	Metal mining services.....	143,627	47,886	76,418	10,922	8,401	15,334	4,151	11,183	<sup>13</sup> 6,147	<sup>13</sup> 228,542
109	Miscellaneous metal ores.....	88,244	17,091	36,415	5,960	28,778	34,429	542	33,887	(X)	(X)
102	Copper ores.....	81,212	14,845	32,212	5,645	28,510	33,654	179	33,475	8,150	40,886
103	Lead and zinc ores.....	5,996	1,770	4,203	9	14	72	21	51	1,213	(D)
103	Idaho.....	11,808	<sup>5</sup> 9,358	( <sup>5</sup> )	1,655	795	3,830	1,683	2,147	(X)	(X)
104	Lead and zinc ores.....	5,215	4,984	-	17	214	924	710	214	984	(D)
	Gold and silver ores.....	4,637	<sup>5</sup> 4,127	( <sup>5</sup> )	153	357	1,188	945	243	508	(D)
101	Wyoming.....	31,753	14,355	10,612	4,728	2,058	3,847	2,294	1,553	(X)	(X)
	Iron ores.....	6,270	6,120	-	-	150	395	-	395	4,378	<sup>12</sup> 17,298

See footnotes at end of table.

**TABLE 2B. Selected Expenditures, Crude Ore Mined, and Value of Net Shipments for Selected Industry Groups and Geographic Areas: 1963—Continued**

(For explanation of column captions see Introduction)

Ind. code	Industry group and geographic area	Selected expenses (\$1,000)					Capital expenditures (\$1,000)			Crude ore mined  (1,000 short tons)	Value of net shipments of primary products <sup>2</sup>  (\$1,000)
		Total	Supplies, purchases for resale, and purchased fuels and electric energy	Minerals received for treatment	Contract work	Purchased machinery installed	Total	Development and exploration of mineral property	Plant, other construction, machinery, and equipment <sup>1</sup>		
	Geographic Areas--Continued										
	Mountain--Continued										
109	Colorado.....	53,667	28,114	19,256	3,925	2,372	6,847	2,082	4,765	(X)	(X)
	Miscellaneous metal ores.....	33,794	12,275	19,256	987	1,276	2,891	638	2,253	131,109	(D)
102	Arizona.....	135,878	81,590	25,603	16,619	12,066	40,017	19,110	20,907	(X)	(X)
108	Copper ores.....	123,186	98,908	( <sup>5</sup> )	15,608	8,670	35,885	18,355	17,530	80,766	316,516
	Metal mining services.....	5,640	3,192	-	186	2,262	2,272	-	2,272	(X)	14,686
	Utah:										
101	Iron ores.....	2,655	1,591	-	1,057	7	263	65	198	2,082	12,545
103	Lead and zinc ores.....	14,426	3,468	8,945	832	1,181	3,529	2,259	1,270	645	16,568
	Nevada.....	30,219	27,269	( <sup>5</sup> )	1,175	1,775	3,680	1,653	2,027	(X)	(X)
	Pacific.....	23,261	16,205	60	2,169	4,827	7,984	2,235	5,749	(X)	(X)
101	Iron ores.....	10,094	6,040	-	596	3,458	3,601	140	3,461	7,015	(D)
102	Copper, lead, zinc, gold, and silver ores.....	6,561	4,859	-	988	714	2,730	1,687	1,043	1,029	15,297
104	Ferrous alloy ores.....	4,382	3,797	60	41	484	1,210	221	989	(X)	(X)
106	Miscellaneous metal ores.....	2,195	1,483	-	543	169	432	187	245	(X)	(X)
109	Alaska.....	1,892	1,474	-	295	123	677	497	180	(X)	(X)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Represents expenditures during the year for both new and used plant and equipment.

<sup>2</sup>Represents gross shipments of the mineral indicated by the industry name less minerals transferred to other establishments for treatment or less minerals received from other establishments for treatment.

<sup>3</sup>Represents net shipments by all industries.

<sup>4</sup>Includes ore valued chiefly for copper produced in other industries, amounting to less than 0.01 percent of the United States total.

<sup>5</sup>The cost of minerals received for treatment is combined with the cost of supplies, purchases for resale, and purchased fuels and electric energy.

<sup>6</sup>Represents lode ores only. In addition, 23,774 thousand cubic yards of placer gravels were washed in the United States to recover gold and silver.

<sup>7</sup>Represents manganese ores only.

<sup>8</sup>Includes in addition to net shipments, the value of secondary products and resales.

<sup>9</sup>Represents mercury and uranium-vanadium ores only. In addition, for the United States, 25,720 thousand short tons of crude titanium ores were mined for processing, and small quantities of antimony ores, beryllium ores, platinum sands, rare earths, and zirconium ores.

<sup>10</sup>Figures for East North Central are included with those for West North Central.

<sup>11</sup>Includes figures for South Atlantic.

<sup>12</sup>Includes in addition to net shipments, the value of secondary products and services.

<sup>13</sup>Represents uranium-vanadium ores only, except that the value figures for Mountain include the value of secondary products and services of the Uranium-Radium-Vanadium Ores Industry.

<sup>14</sup>Represents receipts for metal mining services in all industries.

TABLE 2C. Selected Statistics for Industry Groups, Except Service Industries, by Type of Operation and Geographic Area: 1963

Ind. code	Industry group and geographic area	All types of establishments, total	Producing establishments										Non-producing establishments
			Total	Mining only				Mines with treatment plants				Separately operated treatment plants	
				Total	Underground mines	Open-pit mines	Combination methods and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
	UNITED STATES												
	Establishments.....number..	1,531	1,035	578	406	160	12	392	108	274	10	65	496
	Employees.....do.....	175,004	68,380	18,115	8,036	6,751	3,328	43,488	23,406	19,214	868	6,777	1,990
	Value added in mining..\$1,000..	1,393,481	1,399,570	323,353	136,185	156,554	30,614	916,691	338,347	560,438	17,906	159,526	(2)
101	Iron ores:												
	Establishments.....number..	208	180	67	22	45	-	102	12	90	-	11	28
	Employees.....do.....	123,083	20,123	4,589	2,602	1,987	-	13,849	4,043	9,806	-	1,685	846
	Value added in mining..\$1,000..	549,305	554,943	101,812	47,155	54,657	-	382,530	57,123	325,407	-	70,601	(2)
102	Copper ores:												
	Establishments.....number..	160	90	49	25	22	2	33	15	18	-	8	70
	Employees.....do.....	126,486	24,308	8,710	1,831	(D)	(D)	12,502	5,103	7,399	-	3,096	211
	Value added in mining..\$1,000..	417,089	417,023	124,063	19,923	(D)	(D)	239,783	55,158	184,625	-	53,177	66
103	Lead and zinc ores:												
	Establishments.....number..	205	147	96	84	11	1	42	40	1	1	9	58
	Employees.....do.....	19,422	8,948	(D)	1,614	(D)	(D)	(D)	6,264	(D)	(D)	642	178
	Value added in mining..\$1,000..	84,373	84,618	(D)	12,818	(D)	(D)	(D)	62,589	(D)	(D)	6,092	(2)
104	Gold and silver ores:												
	Establishments.....number..	466	237	87	60	24	3	149	26	120	3	1	229
	Employees.....do.....	4,216	3,825	(D)	(D)	150	(D)	3,470	(D)	340	(D)	(D)	391
	Value added in mining..\$1,000..	49,026	48,331	(D)	(D)	1,355	(D)	46,212	(D)	5,852	(D)	(D)	695
105	Bauxite:												
	Establishments.....number..	17	16	9	1	7	1	1	-	1	-	6	1
	Employees.....do.....	552	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)	-	(D)	(D)
	Value added in mining..\$1,000..	17,464	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)	-	(D)	(D)
106	Ferroalloy ores:												
	Establishments.....number..	58	19	5	1	4	-	7	5	2	-	7	39
	Employees.....do.....	13,102	2,873	111	(D)	(D)	-	2,527	(D)	(D)	-	235	193
	Value added in mining..\$1,000..	66,407	66,257	1,840	(D)	(D)	-	58,895	(D)	(D)	-	5,522	150
109	Miscellaneous metal ores:												
	Establishments.....number..	417	346	265	213	47	5	58	10	42	6	23	71
	Employees.....do.....	8,730	(D)	(D)	1,880	121	(D)	4,766	2,292	1,658	816	1,021	(D)
	Value added in mining..\$1,000..	209,817	(D)	(D)	55,497	5,660	(D)	125,258	63,018	44,439	17,801	22,850	(D)
	GEOGRAPHIC AREAS												
	Middle Atlantic												
	Establishments.....number..	23	18	1	1	-	-	13	10	3	-	4	5
	Employees.....do.....	135,948	34,873	(D)	(D)	-	-	(D)	3,155	(D)	-	(D)	6
	Value added in mining..\$1,000..	376,805	376,792	(D)	(D)	-	-	(D)	45,597	(D)	-	(D)	13
101	Iron ores:												
	Establishments.....number..	13	10	-	-	-	-	8	7	1	-	2	3
	Employees.....do.....	3,387	(D)	-	-	-	-	(D)	2,604	(D)	-	(D)	(D)
	Value added in mining..\$1,000..	55,598	(D)	-	-	-	-	(D)	37,893	(D)	-	(D)	(D)
	New York:												
	Establishments.....number..	8	7	-	-	-	-	6	4	2	-	1	1
	Employees.....do.....	3,153	(D)	-	-	-	-	(D)	(D)	(D)	-	(D)	(D)
	Value added in mining..\$1,000..	36,254	(D)	-	-	-	-	(D)	(D)	(D)	-	(D)	(D)
101	Iron ores:												
	Establishments.....number..	4	3	-	-	-	-	3	2	1	-	-	1
	Employees.....do.....	1,267	(D)	-	-	-	-	(D)	(D)	(D)	-	-	(D)
	Value added in mining..\$1,000..	21,158	(D)	-	-	-	-	(D)	(D)	(D)	-	-	(D)
	New Jersey:												
	Establishments.....number..	6	5	1	1	-	-	4	3	1	-	-	1
	Employees.....do.....	3737	(D)	(D)	(D)	-	-	(D)	362	(D)	-	-	(D)
	Value added in mining..\$1,000..	39,237	(D)	(D)	(D)	-	-	(D)	5,597	(D)	-	-	(D)
	Pennsylvania:												
	Establishments.....number..	9	6	-	-	-	-	3	3	-	-	3	3
	Employees.....do.....	42,058	(D)	-	-	-	-	(D)	(D)	-	-	(D)	(D)
	Value added in mining..\$1,000..	31,314	(D)	-	-	-	-	(D)	(D)	-	-	(D)	(D)
	East North Central												
	Establishments.....number..	47	41	23	22	1	-	10	5	5	-	8	6
	Employees.....do.....	57,646	57,510	(D)	(D)	(D)	-	53,848	1,847	52,001	-	(D)	136
	Value added in mining..\$1,000..	5109,299	5108,072	(D)	(D)	(D)	-	549,780	15,399	534,381	-	(D)	1,227
101	Iron ores:												
	Establishments.....number..	26	23	17	16	1	-	4	1	3	-	2	3
	Employees.....do.....	4,736	4,604	2,322	(D)	(D)	-	(D)	(D)	(D)	-	(D)	132
	Value added in mining..\$1,000..	87,718	86,475	41,883	(D)	(D)	-	(D)	(D)	(D)	-	(D)	1,243

See footnotes at end of table.

**TABLE 2C. Selected Statistics for Industry Groups, Except Service Industries, by Type of Operation and Geographic Area: 1963—Continued**

Ind. code	Industry group and geographic area	All types of establishments, total	Producing establishments									Non-producing establishments	
			Total	Mining only				Mines with treatment plants					Separately operated treatment plants
				Total	Underground mines	Open-pit mines	Combination methods and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
	GEOGRAPHIC AREAS—Continued												
	East North Central—Continued												
	Michigan:												
	Establishments.....number..	30	28	17	16	1	-	8	3	5	-	3	2
	Employees.....do.....	<sup>5</sup> 7,139	(D)	2,727	(D)	(D)	-	(D)	(D)	<sup>5</sup> 2,001	-	(D)	(D)
	Value added in mining...\$1,000..	<sup>5</sup> 99,651	(D)	44,373	(D)	(D)	-	(D)	(D)	<sup>5</sup> 34,381	-	(D)	(D)
	Wisconsin:												
	Establishments.....number..	11	8	3	3	-	-	2	2	-	-	3	3
	Employees.....do.....	(D)	(D)	(D)	(D)	-	-	(D)	(D)	-	-	(D)	(D)
	Value added in mining...\$1,000..	5,452	(D)	(D)	(D)	-	-	(D)	(D)	-	-	(D)	(D)
	West North Central												
	Establishments.....number..	124	104	40	15	23	2	54	6	48	-	10	20
	Employees.....do.....	15,628	(D)	1,967	(D)	1,776	(D)	(D)	(D)	7,247	-	1,495	786
	Value added in mining...\$1,000..	(D)	(D)	49,284	(D)	45,681	(D)	(D)	(D)	229,790	-	65,073	( <sup>2</sup> )
101	Iron ores:												
	Establishments.....number..	81	70	16	4	12	-	48	2	46	-	6	11
	Employees.....do.....	11,974	11,291	1,897	(D)	(D)	-	7,972	(D)	(D)	-	1,422	683
	Value added in mining...\$1,000..	344,110	350,974	48,352	(D)	(D)	-	238,133	(D)	(D)	-	64,489	( <sup>2</sup> )
	Minnesota:												
	Establishments.....number..	72	63	16	4	12	-	42	1	41	-	5	9
	Employees.....do.....	11,161	(D)	1,897	(D)	(D)	-	7,740	(D)	(D)	-	(D)	(D)
	Value added in mining...\$1,000..	348,090	(D)	48,352	(D)	(D)	-	235,615	(D)	(D)	-	(D)	(D)
	Missouri:												
	Establishments.....number..	14	10	-	-	-	-	9	4	5	-	1	4
	Employees.....do.....	2,478	1,888	-	-	-	-	(D)	1,836	(D)	-	(D)	590
	Value added in mining...\$1,000..	(D)	(D)	-	-	-	-	(D)	15,006	(D)	-	(D)	(D)
	South Atlantic												
	Establishments.....number..	33	30	10	2	8	-	16	3	13	-	4	3
	Employees.....do.....	1,072	1,065	37	(D)	(D)	-	971	405	566	-	57	7
	Value added in mining...\$1,000..	13,703	13,706	450	(D)	(D)	-	12,190	3,366	8,824	-	1,066	( <sup>2</sup> )
109	Miscellaneous metal ores:												
	Establishments.....number..	6	6	-	-	-	-	5	-	5	-	1	-
	Employees.....do.....	490	490	-	-	-	-	(D)	-	(D)	-	(D)	-
	Value added in mining...\$1,000..	8,095	8,095	-	-	-	-	(D)	-	(D)	-	(D)	-
	Virginia:												
	Establishments.....number..	4	4	-	-	-	-	3	2	1	-	1	-
	Employees.....do.....	<sup>3</sup> 396	<sup>3</sup> 396	-	-	-	-	(D)	(D)	(D)	-	(D)	-
	Value added in mining...\$1,000..	<sup>3</sup> 4,401	<sup>3</sup> 4,401	-	-	-	-	(D)	(D)	(D)	-	(D)	-
	East South Central												
	Establishments.....number..	43	40	15	3	12	-	24	5	19	-	1	3
	Employees.....do.....	<sup>5</sup> 1,912	<sup>5</sup> 1,881	(D)	200	(D)	-	1,538	1,088	450	-	(D)	31
	Value added in mining...\$1,000..	<sup>5</sup> 21,419	<sup>5</sup> 21,449	(D)	1,522	(D)	-	18,036	13,997	4,039	-	(D)	( <sup>2</sup> )
101	Iron ores:												
	Establishments.....number..	29	28	9	-	9	-	19	1	18	-	-	1
	Employees.....do.....	926	(D)	(D)	-	(D)	-	859	(D)	(D)	-	-	(D)
	Value added in mining...\$1,000..	11,019	(D)	(D)	-	(D)	-	10,455	(D)	(D)	-	-	(D)
103	Lead and zinc ores:												
	Establishments.....number..	9	7	3	3	-	-	4	4	-	-	-	2
	Employees.....do.....	914	(D)	200	200	-	-	(D)	(D)	-	-	-	(D)
	Value added in mining...\$1,000..	9,564	(D)	1,522	1,522	-	-	(D)	(D)	-	-	-	(D)
	Tennessee:												
	Establishments.....number..	11	9	4	3	1	-	5	4	1	-	-	2
	Employees.....do.....	<sup>9</sup> 942	(D)	(D)	200	(D)	-	673	(D)	(D)	-	-	(D)
	Value added in mining...\$1,000..	<sup>9</sup> 9,952	(D)	(D)	1,522	(D)	-	7,512	(D)	(D)	-	-	(D)
103	Lead and zinc ores:												
	Establishments.....number..	9	7	3	3	-	-	4	4	-	-	-	2
	Employees.....do.....	914	(D)	200	200	-	-	(D)	(D)	-	-	-	(D)
	Value added in mining...\$1,000..	9,564	(D)	1,522	1,522	-	-	(D)	(D)	-	-	-	(D)
	Alabama:												
	Establishments.....number..	32	31	11	-	11	-	19	1	18	-	1	1
	Employees.....do.....	980	(D)	(D)	-	(D)	-	865	(D)	(D)	-	(D)	(D)
	Value added in mining...\$1,000..	11,467	(D)	(D)	-	(D)	-	10,524	(D)	(D)	-	(D)	(D)
	West South Central												
	Establishments.....number..	52	42	22	14	7	1	11	7	4	-	9	10
	Employees.....do.....	<sup>6</sup> 1,233	(D)	514	86	(D)	(D)	(D)	63	(D)	-	196	(D)
	Value added in mining...\$1,000..	(D)	(D)	16,844	761	(D)	(D)	(D)	391	(D)	-	2,119	(D)

See footnotes at end of table.

TABLE 2C. Selected Statistics for Industry Groups, Except Service Industries, by Type of Operation and Geographic Area: 1963—Continued

Ind. code	Industry group and geographic area	All types of establishments, total	Producing establishments										Non-producing establishments
			Total	Mining only				Mines with treatment plants				Separately operated treatment plants	
				Total	Underground mines	Open-pit mines	Combination methods and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
	GEOGRAPHIC AREAS—Continued												
	West South Central—Continued												
101	Iron ores:												
	Establishments.....number..	5	5	1	-	1	-	4	-	4	-	-	-
	Employees.....do.....	328	328	(D)	-	(D)	-	(D)	-	(D)	-	-	-
	Value added in mining..\$1,000..	4,375	4,375	(D)	-	(D)	-	(D)	-	(D)	-	-	-
105	Bauxite:												
	Establishments.....number..	8	8	4	1	2	1	-	-	-	-	4	-
	Employees.....do.....	489	489	(D)	(D)	(D)	(D)	-	-	-	-	(D)	-
	Value added in mining..\$1,000..	16,725	16,725	(D)	(D)	(D)	(D)	-	-	-	-	(D)	-
	Arkansas:												
	Establishments.....number..	14	9	4	1	2	1	1	-	1	-	4	5
	Employees.....do.....	3543	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)	-	(D)	(D)
	Value added in mining..\$1,000..	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	(D)	-	(D)	(D)
105	Bauxite:												
	Establishments.....number..	8	8	4	1	2	1	-	-	-	-	4	-
	Employees.....do.....	489	489	(D)	(D)	(D)	(D)	-	-	-	-	(D)	-
	Value added in mining..\$1,000..	16,725	16,725	(D)	(D)	(D)	(D)	-	-	-	-	(D)	-
	Texas:												
	Establishments.....number..	16	11	5	-	5	-	3	-	3	-	3	5
	Employees.....do.....	7421	(D)	(D)	-	(D)	-	(D)	-	(D)	-	(D)	(D)
	Value added in mining..\$1,000..	(D)	(D)	(D)	-	(D)	-	(D)	-	(D)	-	(D)	(D)
	Mountain												
	Establishments.....number..	874	568	424	319	100	5	114	53	56	5	30	306
	Employees.....do.....	(D)	38,448	11,865	4,187	4,620	3,058	22,427	13,115	8,614	698	4,156	(D)
	Value added in mining..\$1,000..	(D)	728,316	203,198	81,247	100,039	21,912	448,185	208,854	222,844	16,487	76,933	(D)
101	Iron ores:												
	Establishments.....number..	30	23	14	1	13	-	9	1	8	-	-	7
	Employees.....do.....	1,085	1,066	285	(D)	(D)	-	781	(D)	(D)	-	-	19
	Value added in mining..\$1,000..	25,328	25,323	10,329	(D)	(D)	-	14,994	(D)	(D)	-	-	5
106	Ferroalloy ores:												
	Establishments.....number..	33	10	3	1	2	-	5	3	2	-	2	23
	Employees.....do.....	2,303	2,180	(D)	(D)	(D)	-	2,107	(D)	(D)	-	(D)	123
	Value added in mining..\$1,000..	(D)	54,708	(D)	(D)	(D)	-	53,937	(D)	(D)	-	(D)	(D)
109	Miscellaneous metal ores:												
	Establishments.....number..	323	275	238	207	28	3	21	7	11	3	16	48
	Employees.....do.....	6,505	6,435	1,969	1,868	(D)	(D)	3,580	2,266	(D)	(D)	886	70
	Value added in mining..\$1,000..	184,090	184,084	60,591	55,388	(D)	(D)	102,386	61,713	(D)	(D)	21,107	6
	Montana:												
	Establishments.....number..	78	46	35	28	5	2	7	5	1	1	4	32
	Employees.....do.....	54,296	54,228	53,518	55	(D)	(D)	(D)	(D)	(D)	(D)	(D)	68
	Value added in mining..\$1,000..	528,357	528,527	522,505	409	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(2)
102	Copper ores:												
	Establishments.....number..	13	9	6	5	-	1	1	1	-	-	2	4
	Employees.....do.....	3,571	3,558	2,688	(D)	-	(D)	(D)	(D)	-	-	(D)	13
	Value added in mining..\$1,000..	23,482	23,448	19,086	(D)	-	(D)	(D)	(D)	-	-	(D)	34
103	Lead and zinc ores:												
	Establishments.....number..	13	10	9	8	-	1	-	-	-	-	1	3
	Employees.....do.....	537	536	(D)	(D)	-	(D)	-	-	-	-	(D)	1
	Value added in mining..\$1,000..	3,664	3,671	(D)	(D)	-	(D)	-	-	-	-	(D)	(2)
	Idaho:												
	Establishments.....number..	82	38	20	12	8	-	17	13	4	-	1	44
	Employees.....do.....	2,661	(D)	(D)	31	(D)	-	2,493	2,492	1	-	(D)	(D)
	Value added in mining..\$1,000..	31,263	(D)	(D)	129	(D)	-	31,011	30,973	38	-	(D)	(D)
103	Lead and zinc ores:												
	Establishments.....number..	29	16	9	7	2	-	7	6	1	-	-	13
	Employees.....do.....	1,726	1,688	(D)	(D)	(D)	-	(D)	(D)	(D)	-	-	38
	Value added in mining..\$1,000..	14,195	14,196	(D)	(D)	(D)	-	(D)	(D)	(D)	-	-	(2)
104	Gold and silver ores:												
	Establishments.....number..	37	15	6	4	2	-	9	7	2	-	-	22
	Employees.....do.....	988	936	7	(D)	(D)	-	929	(D)	(D)	-	-	52
	Value added in mining..\$1,000..	17,124	16,971	48	(D)	(D)	-	16,923	(D)	(D)	-	-	153
	Wyoming:												
	Establishments.....number..	40	34	23	9	14	-	10	1	8	1	1	6
	Employees.....do.....	1,652	(D)	(D)	344	(D)	-	(D)	(D)	923	(D)	(D)	(D)
	Value added in mining..\$1,000..	48,261	(D)	(D)	7,455	(D)	-	(D)	(D)	29,402	(D)	(D)	(D)

See footnotes at end of table.

TABLE 2C. Selected Statistics for Industry Groups, Except Service Industries, by Type of Operation and Geographic Area: 1963—Continued

Ind. code	Industry group and geographic area	All types of establishments, total	Producing establishments									Non-producing establishments	
			Total	Mining only				Mines with treatment plants					Separately operated treatment plants
				Total	Underground mines	Open-pit mines	Combination methods and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
	GEOGRAPHIC AREAS—Continued												
	Mountain—Continued												
	Wyoming—Continued												
101	Iron ores:												
	Establishments.....number..	4	4	2	1	1	-	2	-	2	-	-	-
	Employees.....do.....	621	621	(D)	(D)	(D)	-	(D)	-	(D)	-	-	-
	Value added in mining..\$1,000..	11,423	11,423	(D)	(D)	(D)	-	(D)	-	(D)	-	-	-
	Colorado:												
	Establishments.....number..	223	158	138	129	8	1	12	9	3	-	8	65
	Employees.....do.....	4,944	4,702	889	878	(D)	(D)	3,513	3,423	90	-	300	107
	Value added in mining..\$1,000..	94,067	93,996	13,579	13,405	(D)	(D)	73,635	69,807	3,828	-	6,782	71
109	Miscellaneous metal ores:												
	Establishments.....number..	131	120	109	105	4	-	3	2	1	-	8	11
	Employees.....do.....	1,747	1,728	865	855	10	-	563	(D)	(D)	-	300	19
	Value added in mining..\$1,000..	30,081	30,099	13,097	12,927	170	-	10,220	(D)	(D)	-	6,782	80
	New Mexico:												
	Establishments.....number..	65	49	34	24	9	1	10	5	3	2	5	16
	Employees.....do.....	34,182	34,084	31,376	(D)	620	(D)	2,173	(D)	(D)	(D)	535	98
	Value added in mining..\$1,000..	(D)	106,045	30,646	(D)	22,986	(D)	65,256	(D)	(D)	(D)	10,143	(D)
	Arizona:												
	Establishments.....number..	143	83	47	20	26	1	32	13	17	2	4	61
	Employees.....do.....	13,172	13,072	(D)	(D)	640	(D)	(D)	3,681	6,758	(D)	(D)	100
	Value added in mining..\$1,000..	264,939	265,203	(D)	(D)	13,095	(D)	(D)	46,262	177,715	(D)	(D)	(2)
102	Copper ores:												
	Establishments.....number..	65	40	21	6	14	1	18	7	11	-	1	25
	Employees.....do.....	12,507	12,471	(D)	1,098	631	(D)	10,160	3,410	6,750	-	(D)	36
	Value added in mining..\$1,000..	257,765	257,760	(D)	15,358	13,014	(D)	220,764	43,070	177,694	-	(D)	5
	Utah:												
	Establishments.....number..	143	112	101	89	11	1	5	3	2	-	6	31
	Employees.....do.....	6,272	5,993	3,663	1,100	(D)	(D)	(D)	(D)	(D)	-	(D)	81
	Value added in mining..\$1,000..	(D)	129,141	79,016	33,441	(D)	(D)	(D)	(D)	(D)	-	(D)	(D)
101	Iron ores:												
	Establishments.....number..	6	5	4	-	4	-	1	-	1	-	-	1
	Employees.....do.....	283	(D)	(D)	-	(D)	-	(D)	-	(D)	-	-	(D)
	Value added in mining..\$1,000..	11,116	(D)	(D)	-	(D)	-	(D)	-	(D)	-	-	(D)
103	Lead and zinc ores:												
	Establishments.....number..	22	18	14	12	2	-	2	2	-	-	2	4
	Employees.....do.....	1,094	1,073	657	(D)	(D)	-	(D)	(D)	-	-	(D)	21
	Value added in mining..\$1,000..	11,962	11,975	5,607	(D)	(D)	-	(D)	(D)	-	-	(D)	(2)
	Nevada:												
	Establishments.....number..	100	49	26	8	17	1	22	4	18	-	1	51
	Employees.....do.....	1,909	1,761	(D)	(D)	699	(D)	755	92	663	-	(D)	148
	Value added in mining..\$1,000..	26,060	26,453	(D)	(D)	13,283	(D)	9,173	946	8,227	-	(D)	(2)
	Pacific												
	Establishments.....number..	334	189	42	30	11	1	147	19	123	5	-	145
	Employees.....do.....	2,523	2,236	158	(D)	96	(D)	2,078	(D)	1,108	(D)	-	287
	Value added in mining..\$1,000..	45,816	45,580	2,568	(D)	1,887	(D)	43,012	(D)	31,663	(D)	-	236
101	Iron ores:												
	Establishments.....number..	9	6	4	-	4	-	2	-	2	-	-	3
	Employees.....do.....	525	521	(D)	-	(D)	-	(D)	-	(D)	-	-	4
	Value added in mining..\$1,000..	19,849	19,852	(D)	-	(D)	-	(D)	-	(D)	-	-	(2)
106	Ferroalloy ores:												
	Establishments.....number..	15	3	2	-	2	-	1	1	-	-	-	12
	Employees.....do.....	510	444	(D)	-	(D)	-	(D)	(D)	-	-	-	66
	Value added in mining..\$1,000..	6,214	6,148	(D)	-	(D)	-	(D)	(D)	-	-	-	66
109	Miscellaneous metal ores:												
	Establishments.....number..	50	34	6	2	4	-	28	3	22	3	-	16
	Employees.....do.....	372	351	11	(D)	(D)	-	340	26	122	192	-	21
	Value added in mining..\$1,000..	9,742	9,741	195	(D)	(D)	-	9,546	2,537	5,603	1,406	-	1
	Alaska:												
	Establishments.....number..	85	60	-	-	-	-	60	2	57	1	-	25
	Employees.....do.....	297	247	-	-	-	-	247	(D)	(D)	(D)	-	50
	Value added in mining..\$1,000..	5,197	5,136	-	-	-	-	5,136	(D)	(D)	(D)	-	61

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

1 Includes figures for separately reported central offices and related facilities which were not distributed by type of operation.

2 Not shown since the cost of supplies, purchased fuels and electric energy, contract work, and purchased machinery installed exceeded the sum of value of shipments and receipts and capital expenditures.

3 Includes figures for 1 metal mining services establishment. For Middle Atlantic, see also footnote 4.

4 Includes figures for separately reported central offices and related facilities in Massachusetts.

5 Includes figures for 2 metal mining services establishments.

TABLE 3. Detailed

Item	10-Metal mining industries	1011-Iron ores industry	1021-Copper ores industry	1031-Lead and zinc ores		
				Industry, total	Lead ores subindustry	Zinc ores subindustry
1 Number of operating companies.....	1,308	115	118	163	117	50
2 Establishments, total.....number..	1,614	208	160	205	125	80
3 With 0 to 19 employees.....do....	1,316	107	119	159	112	47
4 With 20 to 99 employees.....do....	149	45	9	22	5	17
5 With 100 employees and over.....do....	149	56	32	24	8	16
6 Including mines.....do....	1,465	197	152	196	124	72
7 Including treatment plants.....do....	539	118	49	54	16	38
8 Net shipments of primary products <sup>1</sup> .....	(X)	74,537	145,312	14,154	4,563	9,591
9 Value of shipments and receipts.....\$1,000..	2,128,246	762,234	670,173	135,965	50,743	85,222
10 Minerals transferred to other establishments for treatment and resale.....do....	293,581	52,882	125,934	16,180	5,993	10,187
11 Net shipments and receipts, total.....do....	1,835,665	709,352	544,239	119,785	44,750	75,035
12 Primary products or services.....do....	(X)	709,352	522,122	109,684	44,750	75,035
13 Other products and services <sup>2</sup> .....do....	(X)		22,117	10,101		
14 Value added in mining.....do....	1,418,217	549,305	417,089	84,373	34,046	50,327
15 Persons in industry, total.....number..	78,245	23,119	26,595	9,510	4,381	5,129
16 Production, development, and exploration workers (average for the year).....do....	62,182	18,102	21,372	7,822	3,401	4,421
17 Other employees.....do....	15,028	4,981	5,114	1,600	919	681
18 Proprietors and firm members.....do....	1,035	36	109	88	61	27
19 Performing manual labor.....do....	866	33	84	79	59	20
20 Man-hours worked by production, development, and exploration workers, total.....1,000..	125,663	34,524	45,319	14,781	5,948	8,833
21 At mines, total.....do....	95,844	24,960	34,173	12,631	5,547	7,084
22 Underground.....do....	45,324	8,197	12,148	10,296	4,489	5,807
23 Open-pit.....do....	26,704	10,351	12,694	47	15	32
24 Surface (including mine shops and yards).....do....	23,816	6,412	9,331	2,288	1,043	1,245
25 At treatment plants.....do....	29,819	9,564	11,146	2,150	401	1,749
26 Man-hours spent on development and exploration work (included above).....do....	7,443	3,001	1,315	1,029	354	675
27 Principal expenses designated below, total.....\$1,000..	1,359,700	443,255	481,879	108,553	42,801	65,752
28 Wages of production, development, and exploration workers.....do....	383,671	112,781	142,395	37,935	15,333	22,602
29 Salaries of all other employees.....do....	131,536	48,790	44,912	11,402	6,559	4,843
30 Supplies <sup>3</sup> .....do....	331,116	120,388	108,493	22,848		
31 Minerals received for treatment.....do....	331,733	64,616	129,793	26,113	15,886	33,075
32 Purchased fuels.....do....	39,448	23,341	7,961	933	259	674
33 Purchased electric energy.....do....	51,395	17,829	17,788	5,734	2,233	3,501
34 Contract work.....do....	110,801	55,510	30,537	3,588	2,531	1,057
35 Purchased machinery installed.....do....	96,480	27,889	45,590	4,272	1,896	2,376
36 Capital expenditures, total.....do....	230,944	96,644	87,078	11,896	6,108	5,788
37 Development and exploration of mineral property.....do....	65,068	23,251	23,145	6,919	4,063	2,856
38 Treatment plant and other construction.....do....	83,892	51,734	24,718	1,083	250	833
39 New machinery and equipment.....do....	75,222	19,063	39,021	3,579	1,766	1,813
40 Used plant and equipment.....do....	6,762	2,596	194	315	29	286
41 Energy used.....million kwh equivalent..	31,911	17,725	8,242	1,091	389	702
42 Coal.....1,000 short tons..	1,204	972	146	10	2	8
43 Distillate fuel oil.....1,000 barrels..	1,842	929	466	75	10	65
44 Residual fuel oil.....do....	2,067	1,744	116	17	4	13
45 Gas.....million cu. ft..	29,888	11,921	10,823	587	191	396
46 Gasoline.....1,000 gallons..	10,481	2,942	2,502	745	435	310
47 Other fuels and undistributed.....\$1,000..	1,886	543	494	101	66	35
48 Electric energy purchased.....million kw.-hrs	5,678	1,597	2,571	622	259	363
49 Electric energy generated and used.....do..	2,654	1,746	813	15	-	15
50 Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total..1,000 hp..	6,115	2,646	1,886	435	207	228
51 Per production worker.....horsepower..	98	145	88	56	61	52
52 Prime movers.....1,000 hp..	3,424	1,653	963	95	34	61
53 Electric motors driven by purchased energy.....do..	2,691	993	923	340	173	167
54 Horsepower rating of electric motors driven by energy generated at the establishment.....do..	676	388	245	4	(2)	4

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable

<sup>1</sup>Represents long tons for the Iron Ores, Bauxite, and Manganese Ores Industries, flasks for the Mercury Ores Industry, and short tons for all other industries. The figures for the Iron Ores and Copper Ores Industries include data for establishments in other industries. The figure for the Iron Ores Industry includes shipments of manganese iron ore valued chiefly for its iron content. For the Copper Ores, Lead and Zinc Ores, Lode Gold, Silver Ores, and Manganese Ores Industries, the figures shown represent thousands of tons of crude ore mined in the respective industries. For the Mercury Ores Industry, represents the number of flasks (76 pounds each) of mercury metal produced. The Titanium Ores Industry, represents thousands of short tons of titanium (ilmenite and rutile) concentrates produced. For the Uranium-Radium-Vanadium Ores Industry, represents thousands of short tons of crude uranium-radium ores mined.

<sup>2</sup>Figures for resales are included with those for net shipments and receipts.

## Statistics: 1963

104—Gold and silver ores				1051—Bauxite industry	106—Ferroalloy ores, except vanadium			1081—Metal mining services industry	109—Miscellaneous metal ores						
Industry group, total	1042—Lode gold industry	1043—Placer gold industry	1044—Silver ores industry		Industry group, total	1062—Manganese ores industry	1064 and 1069—Tungsten ores and ferroalloy ores, n.e.c.		Industry group, total	1092—Mercury ores industry	1093—Titanium ores industry	1094—Uranium-radium-vanadium ores industry	1099—Metallic ores, n.e.c. industry		
459	199	155	105	10	48	16	33	82	346	49	7	266	25	1	
466	201	158	107	17	58	17	41	83	417	49	8	335	25	2	
451	196	156	99	13	47	12	35	66	354	46	1	284	23	3	
8	3	1	4	2	8	5	3	19	43	2	2	37	2	4	
7	2	1	4	2	3	-	3	5	20	1	5	14	-	5	
465	200	158	107	11	50	11	39	(X)	394	49	8	318	19	6	
203	34	158	11	7	17	8	9	(X)	91	38	8	37	8	7	
3,430	2,514	(X)	916	1,478	(X)	55	(X)	(X)	(X)	19,188	91	6,383	(X)	8	
60,224	26,632	7,532	26,060	21,491	90,704	7,228	83,476	32,360	355,095	3,658	22,033	326,370	3,034	9	
60,224	-	-	26,060	21,491	26,985	24,424	2,561	3	89,584	-	-	326,370	3,034	10	
56,794	26,632	7,532	23,678	20,478	283,719	22,804	80,915	32,357	265,511	3,658	22,033	236,504	(D)	11	
(D)	26,325	6,791	(D)	(D)	283,719	22,804	80,915	30,989	260,609	3,632	22,033	(D)	(D)	12	
49,026	307	741	21,904	17,464	2,348	64,059	24,736	1,368	4,902	26	15,021	190,629	1,598	14	
4,625	21,312	5,810	1,536	558	2,348	2,893	2,243	209,817	2,569	344	997	6,957	176	15	
3,585	2,563	526	1,169	414	3,121	228	2,447	8,474	279	846	5,114	130	16		
631	2,091	325	289	138	2,627	180	431	315	1,774	37	151	1,551	35	17	
409	306	36	78	6	475	44	15	37	331	28	-	292	11	18	
373	166	165	78	6	19	4	14	28	246	27	-	208	11	19	
	131	164	78	6	17	3									
7,605	4,544	731	2,330	751	4,867	351	4,516	4,018	13,798	610	1,721	11,251	216	20	
6,894	4,107	679	2,108	605	3,411	154	3,257	4,018	9,152	462	915	7,655	120	21	
4,369	2,604	17	1,748	197	2,710	38	2,672	41,382	6,025	326	-	5,699	-	22	
435	106	326	3	144	272	108	164	51,231	1,530	69	553	832	76	23	
2,090	1,397	336	357	264	429	8	421	61,405	1,597	67	362	1,124	44	24	
711	437	52	222	146	1,456	197	1,259	(X)	4,646	148	806	3,596	96	25	
1,026	553	20	453	7	351	18	333	(X)	714	56	-	595	63	26	
41,156	21,556	4,473	15,127	7,276	49,040	6,223	42,817	20,802	207,739	3,117	13,488	188,334	2,800	27	
20,019	11,422	1,763	6,834	2,285	15,231	820	14,411	11,485	41,540	1,562	5,131	34,170	677	28	
4,778	2,439	371	1,968	1,157	5,134	318	4,816	2,438	12,925	277	1,270	11,049	329	29	
11,325	5,366	1,000	660	660	398	398	17,537	5,209	47,308	791	3,761	41,747	1,009	30	
1,219	-	(X)	1,474	1,474	4,424	4,424	456	(X)	82,263	-	-	81,636	627	31	
2,017	469	576	174	287	522	66	456	1,204	3,981	135	479	3,253	114	32	
1,798	935	423	659	185	2,112	92	2,020	73	5,677	110	1,362	4,145	40	33	
2,025	925	340	533	1,228	3,682	105	3,577	393	14,065	242	1,485	12,334	4	34	
7,186	484	372	1,169	462	1,453	181	1,272	3,784	11,005	128	2,096	8,555	226	35	
4,513	2,859	989	3,338	269	5,831	386	5,445	3,039	19,001	317	2,171	15,929	584	36	
656	1,863	383	2,267	30	2,363	71	2,292	(X)	4,847	136	-	4,401	310	37	
1,524	207	265	184	43	1,258	38	1,220	102	4,298	37	70	4,147	44	38	
493	626	280	618	196	2,082	234	1,848	2,682	7,075	81	2,098	4,687	209	39	
901	163	61	269	-	128	43	85	255	2,781	63	3	2,694	21	40	
64	324	440	137	234	541	22	519	315	2,862	54	377	2,386	45	41	
37	14	48	2	-	(Z)	(Z)	-	(Z)	12	-	10	2	-	42	
43	13	13	11	5	19	(Z)	19	126	185	10	32	129	14	43	
80	38	1	4	3	42	3	39	1	101	12	57	25	7	44	
375	64	-	16	620	545	13	532	10	5,302	-	3	5,296	3	45	
128	171	72	132	332	226	96	130	1,525	1,834	35	213	1,546	40	46	
198	98	11	19	16	19	14	5	153	432	20	-	398	14	47	
33	76	41	81	12	251	6	245	2	465	9	131	322	3	48	
240	28	2	3	-	-	-	-	(Z)	47	(Z)	-	44	3	49	
67	83	100	57	29	157	20	137	185	537	19	61	434	23	50	
106	40	308	49	70	60	111	56	98	85	68	79	85	177	51	
134	31	51	24	19	45	12	33	182	361	13	27	306	15	52	
23	52	49	33	10	112	8	104	3	176	6	34	128	8	53	
	17	5	1	-	-	-	-	(Z)	16	(Z)	-	15	1	54	

<sup>3</sup>In addition, custom plants operating in the Iron Ores, Lead and Zinc Ores, Lode Gold and Miscellaneous Metal Ores Industries received \$17,154 thousand for the treatment of concentrates on a custom or toll basis. These receipts are not included in the figures for value of shipments in order to avoid duplication, since the value of the custom concentrates shipped is already included in the value of shipments figures.

<sup>4</sup>Represents man-hours on services such as sinking mine shafts, driving mine tunnels, and drilling.

<sup>5</sup>Represents man-hours on stripping overburden and mining for the account of others.

<sup>6</sup>Represents man-hours on exploration work, including geophysical and other exploratory surveying.

<sup>7</sup>Includes the cost of products bought and resold without further processing.



**TABLE 4. Selected Statistics for Establishments Classified by Employment Size, by Geographic Area: 1963**

Item, division, and State	All establishments	Establishments with an average of--									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees or more
United States, total:											
Establishments.....number..	1,614	1,050	151	115	89	60	72	46	17	13	1
All employees:											
Total.....do....	177,212	1,109	1,001	1,603	2,668	4,104	10,929	15,590	11,581	23,836	(D)
Payroll.....\$1,000..	1515,220	4,362	4,623	8,554	15,244	26,071	68,071	99,266	76,699	164,553	(D)
Production, development, and exploration workers:											
Total.....number..	62,182	943	800	1,309	2,286	3,460	9,550	13,585	9,644	20,605	(D)
Man-hours.....1,000..	125,663	1,848	1,567	2,733	4,745	7,123	18,708	26,919	20,099	41,921	(D)
Wages.....\$1,000..	383,671	3,729	3,722	6,813	12,615	21,159	156,519	83,199	62,764	133,151	(D)
Value added in mining.....do....	1,418,717	23,692	11,263	22,190	59,709	108,763	251,943	288,495	197,231	455,431	(D)
Value of shipments and receipts.....do....	2,128,246	29,813	14,383	34,806	101,251	170,565	372,562	480,347	274,273	650,246	(D)
Capital expenditures.....do....	230,944	6,843	3,177	3,594	42,582	6,556	71,405	35,762	24,469	36,556	(D)
Number of establishments by geographic area:											
New England.....	4	3	-	-	1	-	-	-	-	-	-
Maine.....	3	3	-	-	-	-	-	-	-	-	-
Connecticut.....	1	-	-	-	1	-	-	-	-	-	-
Middle Atlantic.....	24	6	1	-	1	4	4	5	3	-	-
New York.....	8	1	-	-	-	1	2	3	1	-	-
New Jersey.....	7	2	1	-	-	1	1	2	-	-	-
Pennsylvania.....	9	3	-	-	1	2	1	-	2	-	-
East North Central.....	49	7	3	5	9	3	11	10	-	1	-
Ohio.....	1	-	-	1	-	-	-	-	-	-	-
Illinois.....	5	1	-	1	2	-	-	1	-	-	-
Michigan.....	32	3	1	1	4	3	10	9	-	1	-
Wisconsin.....	11	3	2	2	3	-	1	-	-	-	-
West North Central.....	139	53	15	15	10	13	23	3	2	5	-
Minnesota.....	77	13	8	8	10	11	20	3	1	3	-
Missouri.....	23	10	4	4	-	-	3	-	1	1	-
North Dakota.....	6	4	2	-	-	-	-	-	-	-	-
South Dakota.....	26	22	1	-	-	2	-	-	-	1	-
Nebraska.....	1	1	-	-	-	-	-	-	-	-	-
Kansas.....	6	3	-	3	-	-	-	-	-	-	-
South Atlantic.....	36	13	6	7	5	1	3	1	-	-	-
Maryland.....	1	-	-	1	-	-	-	-	-	-	-
Virginia.....	5	1	-	1	2	-	-	1	-	-	-
North Carolina.....	6	3	1	1	-	1	-	-	-	-	-
South Carolina.....	1	-	-	1	-	-	-	-	-	-	-
Georgia.....	19	9	5	3	2	-	-	-	-	-	-
Florida.....	4	-	-	-	1	-	3	-	-	-	-
East South Central.....	45	10	6	10	11	3	3	2	-	-	-
Tennessee.....	13	4	-	-	4	1	3	1	-	-	-
Alabama.....	32	6	6	10	7	2	-	1	-	-	-
West South Central.....	56	24	10	11	7	1	1	2	-	-	-
Arkansas.....	15	7	-	3	3	-	1	1	-	-	-
Oklahoma.....	22	8	7	5	1	1	-	-	-	-	-
Texas.....	19	9	3	3	3	-	-	1	-	-	-
Mountain.....	919	644	88	52	40	30	24	21	12	7	1
Montana.....	80	61	6	6	3	-	1	2	-	-	1
Idaho.....	85	68	3	4	3	1	3	2	1	-	-
Wyoming.....	45	20	3	4	7	6	4	1	-	-	-
Colorado.....	235	174	26	15	6	7	3	2	1	1	-
New Mexico.....	66	33	11	4	5	4	3	3	3	-	-
Arizona.....	151	107	11	4	4	4	3	9	5	4	-
Utah.....	150	101	17	10	8	6	5	1	-	2	-
Nevada.....	107	80	11	5	4	2	2	1	2	-	-
Pacific.....	342	290	22	15	5	5	3	2	-	-	-
Washington.....	46	39	1	1	1	3	1	-	-	-	-
Oregon.....	25	21	2	7	-	1	-	-	-	-	-
California.....	186	161	11	7	3	-	2	2	-	-	-
Alaska.....	85	69	8	6	1	1	-	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.  
(NA) Not available. (X) Not applicable.

<sup>1</sup>Includes figures for separately reported central offices and related facilities which were not distributed by size of establishment.

# IRON ORES

## INDUSTRY DESCRIPTION

This report shows 1963 Census of Mineral Industries statistics for establishments classified in industry 1011, Iron Ores. This industry represents establishments primarily engaged in mining, beneficiating, or otherwise preparing iron ores and manganiferous ores valued chiefly for their iron content. The industry includes the production of sinter and other agglomerates in association with mining and beneficiating activities. Blast furnaces primarily engaged in producing pig iron from iron ore are classified as manufacturing plants in industry 3312, Blast Furnaces and Steel Mills. The production of sinter and other agglomerates in conjunction with blast furnace operations is also classified as manufacturing.

## SUMMARY OF FINDINGS

The total value of shipments and receipts of the Iron Ores Industry amounted to \$762 million. Of this total, over 98 percent represented products primary to the industry. Establishments in the iron ores industry accounted for more than 99 percent of the total of approximately 75 million long tons of usable iron ore shipped in all mineral industries.

These figures represent gross value of shipments and contain duplication because of the inclusion of the value of minerals transferred from one establishment to other establishments in the same industry for treatment or resale. The value of iron ores and concentrates transferred to other establishments for beneficiation, agglomeration, or resale was \$53 million which yields a net value of shipments and receipts of \$709 million.

The production index for the primary products of the Iron Ores Industry increased to 106 in 1963 from the 1958 level of 90. The unit value index for 1963 was 119 compared to 123 in 1958. Both indexes were computed on a basis of 1954 = 100.

The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the production of secondary products and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7 to 12) with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry.

## COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the iron ores industry are, in general, comparable with product statistics on iron ores published by the Bureau of Mines. Such differences as occur result principally from differences in data collection methods, coverage, and objectives sought. The most nearly comparable statistics from the two bureaus are shown in the table below. Major reasons for the differences in product statistics are as follows:

1. The Bureau of the Census defines as manganiferous iron ores material containing at least 5 percent manganese in the natural state but valued chiefly for its iron content. Figures for such ores are included in the primary products of the iron ores industry. The Bureau of Mines excludes all manganiferous ores (ores containing 5 to 35 percent manganese) from its statistics on iron ores, although a figure for such ores is reproduced in the Bureau's report on iron ores.

2. Census Bureau crude iron ore statistics exclude any iron ore mined by establishments classified by Census in industries other than iron ores, crude metal ores mined by an establishment usually being designated a primary product of the industry in which the establishment mining it was classified. However, a rough estimate of the magnitude of such crude ore can be made from Census statistics for shipments of iron ores, treated ores, and agglomerates by other industries, and such figures indicate that this production was very small. Bureau of Mines statistics on crude iron ore mined include data for crude iron ore mined regardless of the producing establishments' industry classification.

3. The Bureau of the Census excludes small establishments whose value of products and reported costs of operation were both below \$500. The Bureau of Mines includes all reports obtained regardless of size. However, the contribution to products of such iron ores establishments is very small.

4. Bureau of the Census product statistics cover treated ores and agglomerates produced, whether from domestic or imported materials. The Bureau of Mines excludes the product of foreign ores beneficiated in the United States.

#### 1963 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Bureau of the Census statistics			Bureau of Mines statistics		
	Production  (1,000 long tons)	Shipments in- cluding inter- plant transfers		Production  (1,000 long tons)	Shipments	
		Quantity (1,000 long tons)	Value ((\$1,000)		Quantity (1,000 long tons)	Value ((\$1,000)
Iron ore, except manganiferous iron ore:						
Crude iron ore.....	<sup>1</sup> 152,504	<sup>1</sup> 41,058	<sup>1</sup> 134,300	152,776	(NA)	(NA)
Net production and shipments.....	<sup>1</sup> 73,778	<sup>2</sup> 74,119	<sup>2</sup> 703,715	72,841	73,564	678,181
Manganiferous iron ore:						
Net production and shipments.....	( <sup>1</sup> )	418	2,753	(NA)	<sup>3</sup> 500	(NA)

(NA) Not available.

<sup>1</sup>Manganiferous iron ore is included with "iron ore, except manganiferous iron ore."

<sup>2</sup>Represents direct-shipping ore, treated ores to consumers, and agglomerates.

<sup>3</sup>Represents manganiferous iron ore and for Minnesota ferruginous manganese ore.

# IRON ORES

Distribution of Employment by State: 1963



Employment and Production: 1840 - 1963

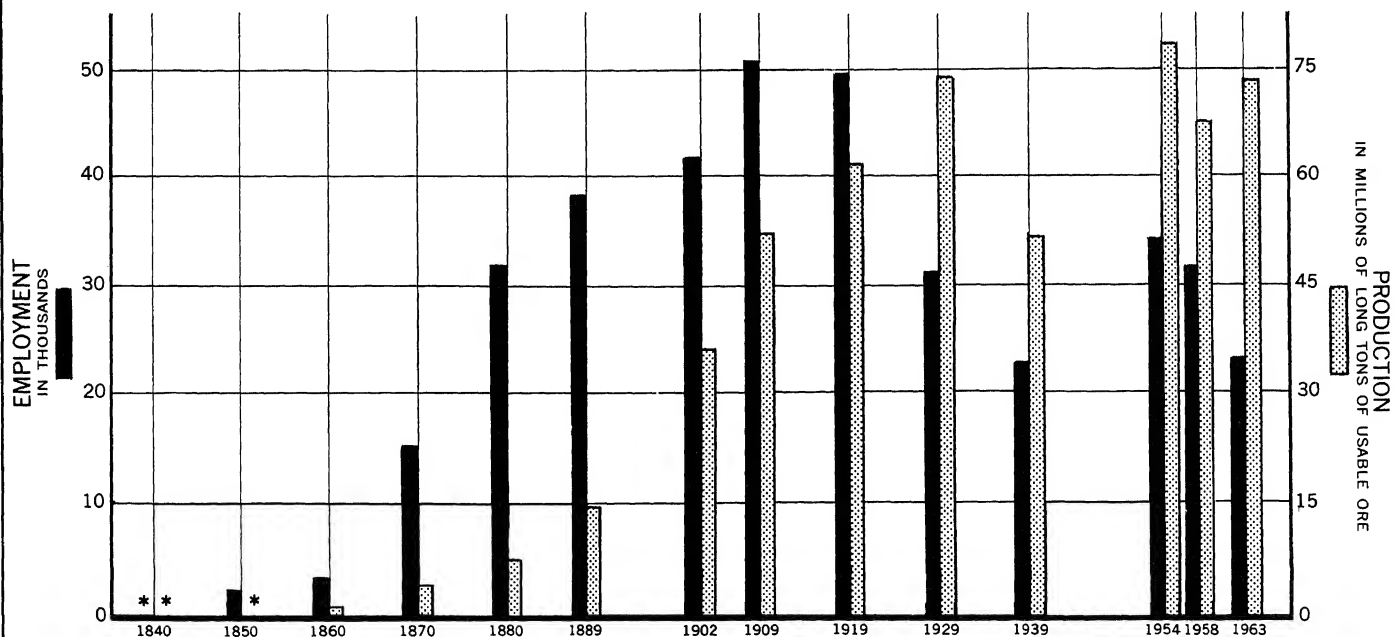


TABLE 1. General Statistics: 1963 and Earlier Years

Year	Operating companies	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses				Value of shipments and receipts	Value of net ship- ments and receipts <sup>1</sup>	Usable iron ore <sup>2</sup> produced  (1,000 long tons)	Capital expend- itures  (\$1,000)	Horse- power rating of power equip- ment  (1,000)
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages		Supplies, fuels, and purchased electric energy	Minerals received for treat- ment or agglomera- tion	Con- tract work	Purchased machinery installed					
	(number)	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)				
	INDUSTRY 1011.—IRON ORES																	
1963.....	115	208	101	23,083	161,571	18,102	34,524	112,781	549,305	161,558	64,616	55,510	27,889	762,234	709,352	73,778	96,644	2,646
1958.....	127	243	128	30,113	169,043	22,517	39,926	116,319	487,667	106,824	64,662	29,442	18,483	664,475	617,925	66,920	42,603	(NA)
1954.....	94	225	135	34,170	156,909	28,216	53,288	119,688	435,668	99,182	12,837	47,515	36,994	547,218	539,160	78,222	84,978	1,795
1939.....	116	<sup>3</sup> 196	(NA)	22,651	33,326	20,377	38,513	27,431	133,390	17,245	(NA)	236	(NA)	(NA)	150,871	51,644	(NA)	600
1935.....	(NA)	<sup>3</sup> 199	(NA)	<sup>4</sup> 16,240	<sup>4</sup> 17,644	14,873	(NA)	14,624	65,861	10,872	(NA)	(NA)	(NA)	(NA)	76,733	31,008	(NA)	(NA)
1929.....	(NA)	186	(NA)	31,113	47,434	28,623	(NA)	41,049	167,127	28,656	(NA)	1,552	4,016	(NA)	197,335	73,962	(NA)	501
1919.....	(NA)	308	(NA)	49,376	83,742	46,339	(NA)	76,698	177,402	38,346	-	2,470	(NA)	218,218	218,218	61,172	(NA)	381
1909 <sup>5</sup> .....	196	320	(NA)	50,614	33,472	47,698	(NA)	30,048	89,567	17,551	-	2,763	(NA)	109,881	109,881	51,718	(NA)	350
1902.....	365	<sup>3</sup> 562	(NA)	41,551	23,822	<sup>6</sup> 39,118	(NA)	21,688	55,675	9,149	(NA)	641	(NA)	(NA)	65,465	35,567	(NA)	120
1889.....	(NA)	<sup>3</sup> 685	(NA)	38,227	14,409	<sup>7</sup> 36,341	(NA)	12,983	26,775	4,999	(NA)	1,578	(NA)	(NA)	33,352	14,518	(NA)	58
1880.....	(NA)	805	(NA)	31,668	9,538	<sup>7</sup> 30,415	(NA)	(NA)	20,263	2,894	(NA)	(NA)	(NA)	(NA)	23,157	7,120	(NA)	28
1870.....	(NA)	420	(NA)	15,022	6,838	(NA)	(NA)	(NA)	11,924	1,280	(NA)	(NA)	(NA)	(NA)	13,204	3,396	(NA)	9
1860.....	(NA)	157	(NA)	3,177	902	(NA)	(NA)	(NA)	1,933	250	(NA)	(NA)	(NA)	(NA)	2,183	908	(NA)	(NA)
1850.....	(NA)	197	(NA)	2,195	591	(NA)	(NA)	(NA)	1,154	64	(NA)	(NA)	(NA)	(NA)	1,218	(NA)	(NA)	(NA)

Note: For explanations of column captions see appendix A. For more detailed historical statistics for these industries see table 1 of the corresponding chapter of the 1954 Census of Mineral Industries, Volume I.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>For 1939 and earlier years, represents value of products and receipts.

<sup>2</sup>Represents direct-shipping ore, treated ores for consumption, and agglomerates. Includes manganiferous iron ore valued chiefly for its iron content. Figures for 1963, 1958, and 1954 include production by establishments classified in industries other than iron ores.

<sup>3</sup>Represents number of mines.

<sup>4</sup>Excludes figures for employees at central offices maintained independently of mine offices.

<sup>5</sup>Excludes data for 2 producing manganiferous iron ore establishments.

<sup>6</sup>Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.

<sup>7</sup>Represents the average number employed during the time the mines were active.

TABLE 2. General Statistics by Geographic Areas and Type of Operation: 1963 and 1958

(For explanation of column captions see Appendix A)

Industry, geographic area, and type of operation <sup>a</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Usable iron ore produced <sup>2</sup>	Capital expenditures	All employees	Value added in mining
	Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)							
1011.—IRON ORES, TOTAL..	208	101	323,083	3161,571	18,102	34,524	112,781	549,305	309,573	762,234	73,778	96,644	330,113	487,667
Geographic Area														
Middle Atlantic.....	13	9	3,387	21,859	2,982	5,624	18,386	55,598	21,062	74,045	4,959	2,615	3,483	33,160
New York.....	4	3	1,267	8,710	1,135	2,089	7,500	21,158	7,080	26,464	2,354	1,774	1,037	16,390
East North Central.....	26	20	4,736	35,629	3,554	6,655	22,954	87,718	92,130	125,638	10,773	54,210	22,467	362,787
West North Central.....	81	48	11,974	85,308	9,001	17,165	55,967	344,110	167,854	477,902	46,817	34,062		
Minnesota.....	72	46	11,161	80,334	8,279	15,769	51,709	348,090	149,384	474,619	46,427	22,855	15,048	291,127
South Atlantic.....	15	2	122	424	110	214	389	1,306	1,727	2,656	256	377	2,870	48,061
East South Central.....	29	10	926	5,127	814	1,723	4,246	11,019	3,823	14,451	2,085	391		
West South Central.....	5	3	328	1,464	280	413	1,184	4,375	1,947	6,156	947	167	938	27,731
Mountain.....	30	8	1,085	7,459	865	1,691	5,565	25,328	10,936	35,043	4,158	1,221		
Wyoming.....	4	2	621	4,304	478	887	2,979	11,423	6,270	17,298	1,576	394	(NA)	(NA)
Utah.....	6	3	283	1,970	225	404	1,515	11,116	2,655	13,508	1,783	263	465	22,186
Nevada.....	10	3	166	1,122	150	341	1,023	2,586	1,923	3,989	760	120	160	2,476
Pacific.....	9	1	525	4,301	496	1,079	4,090	19,851	10,094	26,344	3,783	3,601	356	15,928
Type of Operation														
United States														
Producing establishments, total.....	180	98	20,123	132,860	17,375	33,063	108,273	554,943	252,209	762,234	73,729	44,918	25,906	489,256
Open pits, total.....	135	64	11,793	77,995	10,116	19,823	62,821	380,064	144,463	491,006	50,550	33,421	12,294	315,931
Mines only.....	45	8	1,987	13,432	1,713	3,303	10,836	54,657	16,878	69,672	5,850	1,863	3,016	100,672
Mines with treatment plants.....	90	56	9,806	64,563	8,403	16,520	51,985	325,407	127,585	421,334	44,700	31,658	9,278	214,853
Underground mines, total <sup>4</sup> .....	34	19	6,645	43,384	5,925	10,586	37,091	104,278	23,953	124,245	10,508	3,986	11,768	116,121
Mines only.....	22	8	2,602	16,841	2,349	3,927	14,601	47,155	8,876	53,488	5,041	2,543	8,442	87,521
Mines with treatment plants <sup>4</sup> .....	12	11	4,043	26,543	3,576	6,659	22,490	57,123	15,077	70,757	5,467	1,443	3,326	28,600
Open stoping <sup>4</sup> .....	19	15	2,615	18,100	2,314	4,181	15,404	41,178	9,469	49,047	5,485	1,600	4,508	51,789
Sublevel caving.....	7	5	1,314	8,632	1,178	2,024	7,425	18,979	3,475	22,221	2,338	233	2,901	24,718
Block caving, shrinkage stoping, cut-and-fill stoping, top slicing, square setting, and other.....	8	7	2,716	16,651	2,433	4,382	14,262	44,121	11,009	52,977	2,685	2,153	4,359	39,614
Treatment plants only.....	11	7	1,685	11,481	1,334	2,654	8,361	70,601	83,793	146,983	12,671	7,411	1,844	57,604
Nonproducing establishments.....	28	3	846	5,362	727	1,461	4,508	( <sup>5</sup> )	57,364	-	649	51,726	496	( <sup>5</sup> )
North Central														
Producing establishments, total.....	94	66	13,841	92,959	11,895	22,500	74,673	438,072	203,779	605,153	45,376	36,698	18,291	363,833
Open pits, total.....	62	42	8,790	59,152	7,467	14,615	46,701	311,761	114,416	399,628	39,142	26,549	9,620	251,063
Mines only.....	13	6	1,767	12,032	1,532	2,964	9,726	45,526	14,630	58,347	4,270	1,809	2,414	76,318
Mines with treatment plants.....	49	36	7,023	47,120	5,935	11,651	36,975	266,235	99,786	341,281	34,872	24,740	7,206	174,745
Nonproducing establishments.....	14	3	815	5,206	707	1,419	4,426	( <sup>5</sup> )	57,251	-	649	51,630	486	( <sup>5</sup> )

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>General statistics for some States are not shown separately in this table in order to avoid approximately disclosing figures for individual companies or because of the relatively small size of the statistics. Such States with the number of establishments in each State (and in parentheses the number of employees or employment-size range) are: New Jersey, 4 (362); Pennsylvania, 5 (1,758); Michigan, 23 (3,708); Wisconsin, 3 (815 including employees at separately reported central offices in Ohio); Missouri, 8 (500-999); South Dakota, 1 (0-4); Maryland, 1 (10-19); North Carolina, 1 (0-4); Georgia, 13 (1,000-2,499); Tennessee, 1 (0-4); Alabama, 28 (500-999); Arkansas, 1 (10-19); Texas, 4 (250-499); Montana, 1 (0-4); Idaho, 1 (0-4); Colorado, 1 (0-4); New Mexico, 2 (5-9); Arizona, 5 (5-9); Washington, 1 (0-4); California, 7 (525); and Alaska, 1 (0-4).

<sup>2</sup>Represents direct-shipping ore, treated ores for consumption, and agglomerates. Includes manganese iron ore valued chiefly for its iron content. Includes production by establishments classified in industries other than iron ore.

<sup>3</sup>For 1963, includes 2,114 employees paid \$23,349 thousand in salaries, and, for 1958, includes 3,712 employees at separately reported central offices and related facilities which were not classified by type of operation.

<sup>4</sup>Includes data for one establishment with combination open pit and underground mining methods.

<sup>5</sup>Not shown since the cost of supplies, minerals received for treatment, purchased fuels and electric energy, contract work, and purchased machinery. installed exceeded capital expenditures.

<sup>6</sup>Represents mined or treated, but not shipped in 1963.

TABLE 3A. Detailed Statistics, by Geographic Areas: 1963

Item	United States, total	Middle Atlantic		East North Central Division	West North Central		East South Central Division	West South Central Division	Mountain			Pacific Division
		Division	New York		Division	Minnesota			Division	Wyoming	Utah	
Establishments, total.....number..	208	13	4	26	81	72	29	5	30	4	6	9
With 0 to 19 employees.....do....	107	4	1	6	33	26	19	2	22	2	3	8
With 20 to 99 employees.....do....	45	3	-	4	20	20	9	2	5	-	2	-
With 100 employees and over.....do....	56	6	3	16	28	26	1	1	3	2	1	1
Including mines.....do....	197	11	4	24	75	67	29	5	30	4	6	9
Including treatment plants.....do....	118	10	3	7	57	50	20	4	9	2	1	2
Crude iron-ore mined, total <sup>1</sup> ...1,000 long tons..	152,504	9,213	5,236	( <sup>2</sup> )	<sup>2</sup> 120,759	102,867	<sup>3</sup> 6,435	2,995	6,839	3,909	1,859	6,263
Direct-shipping ore.....do....	12,403	-	-	4,889	5,293	5,293	<sup>3</sup> 6,435	2,995	6,839	3,909	1,859	6,263
Beneficiating-grade ore.....do....	140,101	9,213	5,236	( <sup>2</sup> )	<sup>2</sup> 110,577	97,574						
Usable iron ore shipped <sup>1</sup> 4.....do....	74,537	5,004	2,388	( <sup>2</sup> )	<sup>2</sup> 58,276	46,170	<sup>3</sup> 2,383	905	4,189	1,576	1,809	3,795
Value of shipments and receipts, total...\$1,000..	762,234	74,045	26,464	125,638	477,902	474,619	14,451	6,155	35,043	17,298	13,508	26,344
Beneficiating-grade iron ore, treated ores shipped to agglomeration plants, and resales <sup>1</sup> .....do....	52,882	-	-	125,638	39,097	39,097	-	-	-	-	-	26,344
Net shipments and receipts, total.....do....	709,352	74,045	26,464	(D)	438,805	435,522	14,451	6,155	35,043	17,298	13,508	(D)
Direct-shipping iron ore <sup>1</sup> .....do....	91,926	-	-	(D)	438,805	435,522	904	6,155	13,893	2,547	11,135	(D)
Treated ores, agglomerates, and other products and services <sup>1</sup> .....do....	617,426	74,045	26,464	69,727			13,547		21,150	14,751	2,373	(D)
Value added in mining.....do....	549,305	55,598	21,158	87,718	344,110	348,090	11,019	4,375	25,328	11,423	11,116	19,849
Persons in industry, total.....number..	23,119	3,388	1,260	4,736	11,975	11,161	939	330	1,096	622	283	528
Production, development, and exploration workers (average for year).....do....	18,102	2,982	1,135	3,554	8,991	8,279	814	280	865	478	225	496
January.....do....	15,012	2,858	1,035	3,284	6,477	5,899	824	263	779	423	197	445
February.....do....	15,612	2,998	1,190	3,377	6,811	6,201	813	287	799	432	209	445
March.....do....	16,261	3,011	1,192	3,421	7,344	6,747	811	287	824	445	221	460
April.....do....	17,108	2,913	1,090	3,504	8,184	7,499	806	288	871	486	226	460
May.....do....	18,906	3,032	1,192	3,591	9,759	9,107	799	287	851	471	223	478
June.....do....	19,065	2,833	987	3,634	10,045	9,241	804	290	881	487	228	491
July.....do....	19,161	2,957	1,099	3,517	10,055	9,299	822	289	918	501	232	499
August.....do....	19,306	2,977	1,107	3,633	10,089	9,314	818	275	874	475	225	526
September.....do....	19,379	2,968	1,119	3,666	10,121	9,324	826	274	906	504	234	521
October.....do....	18,743	2,809	958	3,644	9,697	8,876	836	272	898	507	233	503
November.....do....	17,889	2,902	1,044	3,555	8,793	7,928	831	272	912	521	233	519
December.....do....	16,981	2,992	1,131	3,575	7,816	6,922	842	270	887	507	220	515
All other employees.....do....	4,981	405	125	1,182	2,973	2,882	112	48	220	143	58	29
Proprietors and firm members.....do....	36	1	-	-	1	-	13	2	11	1	-	3
Performing manual labor.....do....	33	1	-	-	1	-	13	-	10	1	-	3
Man-hours worked by production, develop- ment, and exploration workers, total...1,000..	34,524	5,624	2,089	6,655	17,165	15,769	1,723	413	1,651	887	404	1,079
At mines, total.....do....	24,960	3,706	955	5,242	11,744	10,588	1,585	224	1,306	677	329	860
Underground.....do....	8,197	2,724	495	2,904	1,745	933	643	-	178	145	-	-
Open-pit.....do....	10,351	279	277	1,056	6,788	6,704	814	175	597	180	247	482
Surface (including mine shops and yards).....do....	6,412	703	183	1,282	3,211	2,951	128	49	531	352	82	378
At treatment plants.....do....	9,564	1,917	1,133	1,412	5,421	5,181	138	189	347	210	75	219
Man-hours spent on development and explora- tion work (included above).....do....	3,001	233	143	718	1,925	945	34	38	33	-	6	17
Principal expenses designated below, total.....\$1,000..	443,255	41,347	15,550	120,002	239,504	221,272	8,614	3,242	17,798	10,424	4,618	10,936
Wages of production, development, and exploration workers.....do....	112,781	18,386	7,500	22,954	55,967	51,709	4,246	1,184	5,565	2,979	1,515	4,090
Salaries of all other employees.....do....	48,790	3,473	1,210	12,675	29,341	28,625	881	280	1,894	1,325	455	211
Supplies <sup>2</sup> .....do....	120,388		3,502				<sup>2</sup> 2,043	580	6,514	4,175	1,327	5,113
Minerals received for treatment or agglomeration.....do....	64,616		-	31,717	124,739	116,769						
Purchased fuel.....do....	23,341	2,869	2,112	4,616	13,850	13,744	478	247	790	496	99	366
Purchased electric energy.....do....	17,829	3,458	1,197	4,414	6,791	6,496	630	274	1,675	1,449	165	561
Contract work.....do....	55,510	19	19	43,626	8,816	3,929	336	677	1,360	-	1,057	596
Purchased machinery installed.....do....	27,889	1,574	240	7,757	13,658	8,446	336	169	597	150	7	3,458

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Geographic Areas: 1963—Continued

Item	United States, total	Middle Atlantic		East North Central Division	West North Central		East South Central Division	West South Central Division	Mountain			Pacific Division
		Division	New York		Division	Minnesota			Division	Wyoming	Utah	
Capital expenditures, total.....\$1,000..	96,644	2,615	1,774	54,210	34,062	22,855	391	167	1,221	395	263	3,601
Development and exploration of mineral property.....do....	23,251	1,791	1,352	5,419	15,598	8,760	65	-	187	-	65	139
Treatment or agglomeration plant construction and other construction.....do....	51,734	174	132	42,105	6,443	4,584	5	-	371	243	120	3,378
New machinery and equipment.....do....	19,063	518	290	6,516	9,928	7,418	282	167	607	150	78	5
Used plant and equipment.....do....	2,596	132	-	170	2,093	2,093	39	-	56	2	-	79
Energy used.....million kw.-hrs. equivalent..	17,725	2,225	1,557	3,236	10,539	10,477	182	723	606	512	46	177
Coal.....1,000 short tons..	972	165	165	170	636	635	-	-	(2)	(2)	-	-
Distillate fuel oil.....1,000 barrels..	929	135	93	78	553	546	44	3	47	25	10	65
Residual fuel oil.....do....	1,744	204	-	756	770	767	-	-	14	-	11	-
Gas.....million cu. ft..	11,921	-	-	8	8,797	8,797	7	2,073	1,035	1,035	-	-
Gasoline.....1,000 gallons..	2,942	234	103	217	1,546	1,491	525	9	226	115	69	182
Other fuels and undistributed <sup>6</sup> .....\$1,000..	543	-	-	49	115	72	105	45	87	1	-	23
Electric energy purchased....million kw.-hrs..	1,557	341	126	383	500	470	58	68	152	139	6	53
Electric energy generated and used.....do....	1,746	-	-	202	1,544	1,544	-	-	-	-	-	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total...1,000 hp..	2,646	219	111	500	1,623	1,558	76	25	133	67	41	58
Per production worker.....horsepower..	145	73	98	141	180	188	93	90	153	141	182	117
Prime movers.....1,000 hp..	1,653	38	23	226	1,191	1,175	51	20	72	22	28	45
Electric motors driven by purchased energy.....do....	993	181	88	274	432	383	25	5	61	45	13	13
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	388	-	-	55	333	333	-	-	-	-	-	-

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

(Z) Less than one-half of the unit of measure specified.

<sup>1</sup>Includes manganiferous iron ore valued chiefly for its iron content.<sup>2</sup>Figures for East North Central are included with those for West North Central.<sup>3</sup>Figures for South Atlantic are included with those for East South Central.<sup>4</sup>Includes iron ore shipped by establishments not classified in the iron ores industry. The iron content (natural percent) of usable iron ore produced, according to the U.S. Department of the Interior, Bureau of Mines, Minerals Yearbook: 1963 was: for United States, 56.2; for Middle Atlantic, 63.1; for East North Central, 57.2; for Minnesota, 56.4; for Alabama, 36.5; for Mountain, 55.4; for Wyoming, 55.4; and for Utah, 42.6.<sup>5</sup>Includes the cost of products bought and resold without further processing.<sup>6</sup>Undistributed fuels costs amounted to \$329 thousand for the United States.



TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1963

Item	All establishments, total	Producing establishments						
		Total	Mines only			Mines with treatment plants		
			Total	Open-pit	Underground	Total	Open-pit	Underground <sup>1</sup>
Establishments, total.....number..	208	180	67	45	22	102	90	12
With 0 to 19 employees.....do....	107	82	43	37	6	35	34	1
With 20 to 99 employees.....do....	45	44	10	6	4	30	28	2
With 100 employees and over.....do....	56	54	14	2	12	37	28	9
Including mines.....do....	197	169	67	45	22	102	90	12
Including treatment plants.....do....	117	113	-	-	-	102	90	12
Crude iron ore mined, total <sup>2</sup> .....1,000 long tons..	152,504	152,072	38,691	32,256	6,435	113,381	104,942	8,439
Direct-shipping ore.....do....	12,403	12,403	10,891	5,850	5,041	1,512	920	592
Beneficiating-grade ore.....do....	140,101	139,669	27,800	26,406	1,394	111,869	104,022	7,847
Usable iron ore shipped <sup>2 3</sup> .....do....	74,537	74,537	12,107	5,954	6,153	50,158	44,783	5,375
Value of shipments and receipts, total.....\$1,000..	762,234	762,234	123,160	69,672	53,488	492,091	421,334	70,757
Beneficiating-grade iron ore, treated ores shipped to agglomeration plants, and resales <sup>2</sup> .....do....	52,882	52,882	41,678	31,906	9,772	11,204	11,204	-
Net shipments and receipts.....do....	709,352	709,352	81,482	37,766	43,716	480,887	410,130	70,757
Value added in mining.....do....	549,305	554,943	101,812	54,637	47,155	382,530	325,407	57,123
Persons in industry, total.....number..	423,119	20,157	4,612	2,010	2,602	13,860	9,815	4,045
Production, development, and exploration workers (average for year).....do....	18,102	17,375	4,062	1,713	2,349	11,979	8,403	3,576
January.....do....	15,012	14,507	3,879	1,485	2,394	9,454	6,010	3,444
February.....do....	15,612	15,104	3,943	1,483	2,460	9,982	6,558	3,424
March.....do....	16,261	15,772	3,995	1,555	2,440	10,570	7,037	3,533
April.....do....	17,108	16,551	4,060	1,616	2,444	11,228	7,788	3,440
May.....do....	18,906	18,248	4,173	1,739	2,434	12,716	9,143	3,573
June.....do....	19,065	18,372	4,208	1,802	2,406	12,778	9,361	3,417
July.....do....	19,161	18,383	4,091	1,875	2,216	12,882	9,518	3,364
August.....do....	19,306	18,513	4,167	1,862	2,305	12,936	9,350	3,586
September.....do....	19,379	18,515	4,180	1,852	2,328	12,934	9,341	3,593
October.....do....	18,743	17,809	4,091	1,798	2,293	12,332	8,860	3,472
November.....do....	17,889	16,925	3,894	1,699	2,195	11,665	8,068	3,597
December.....do....	16,981	15,926	3,872	1,706	2,166	10,716	7,060	3,656
All other employees.....do....	44,981	2,748	527	274	253	1,870	1,403	467
Proprietors and firm members.....do....	36	34	23	23	-	11	9	2
Performing manual labor.....do....	33	31	23	23	-	8	7	1
Man-hours worked by production, development, and exploration workers, total.....1,000..	34,524	33,063	7,230	3,303	3,927	23,179	16,520	6,659
At mines, total.....do....	24,960	23,655	7,230	3,303	3,927	16,425	10,795	5,630
Underground.....do....	8,197	7,531	2,942	-	2,942	4,589	-	4,589
Open-pit.....do....	10,351	10,020	2,301	2,301	-	7,719	7,692	27
Surface (including mine shops and yards).....do....	6,412	6,104	1,987	1,002	985	4,117	3,103	1,014
At treatment plants.....do....	9,564	9,408	-	-	-	6,754	5,725	1,029
Man-hours spent on development and exploration work (included above).....do....	3,001	1,812	187	10	177	1,608	1,454	154
Principal expenses designated below, total.....\$1,000..	443,255	364,183	54,275	28,939	25,336	219,030	178,936	40,094
Wages of production, development, and exploration workers.....do....	112,781	108,273	25,437	10,836	14,601	74,475	51,985	22,490
Salaries of all other employees.....do....	448,790	24,587	4,836	2,596	2,240	16,631	12,578	4,053
Supplies.....do....	120,388	112,331	17,554	12,378	5,176	87,848	79,524	8,324
Minerals received for treatment or agglomeration.....do....	64,616	64,616	-	-	-	-	-	-
Purchased fuel.....do....	23,341	23,138	1,584	1,290	294	15,183	13,841	1,342
Purchased electric energy.....do....	17,829	17,332	2,347	527	1,820	13,526	9,676	3,850
Contract work.....do....	55,510	13,906	2,517	1,312	1,205	11,367	11,332	35
Purchased machinery installed.....do....	27,889	20,886	1,752	1,371	381	14,738	13,212	1,526
Capital expenditures, total.....do....	96,644	44,918	4,406	1,863	2,543	33,101	31,658	1,443
Development and exploration of mineral property.....do....	23,251	14,493	2,448	407	2,041	12,021	11,230	791
Treatment or agglomeration plant construction and other construction.....do....	51,734	12,842	219	69	150	9,365	9,343	22
New machinery and equipment.....do....	19,063	14,983	1,714	1,383	331	9,241	8,780	461
Used plant and equipment.....do....	2,596	2,596	25	4	21	2,474	2,305	169
Energy used.....million kw.-hrs..	17,725	17,549	758	452	306	11,825	10,627	1,198
Coal.....1,000 short tons..	972	969	14	(2)	14	703	658	45
Distillate fuel oil.....1,000 barrels..	929	918	217	204	13	632	580	52
Residual fuel oil.....do....	1,744	1,736	22	-	22	1,631	1,413	218
Gas.....million cu. ft..	11,921	11,717	13	7	6	3,160	3,160	-
Gasoline.....1,000 gallons..	2,942	2,891	524	450	74	2,206	2,055	151
Other fuels and undistributed.....\$1,000..	543	509	92	87	5	362	322	40
Electric energy purchased.....million kw.-hrs. equivalent..	1,557	1,511	194	64	130	1,205	858	347
Electric energy generated and used.....do....	1,746	1,746	-	-	-	1,074	1,074	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	2,646	2,482	483	292	191	1,727	1,492	235
Per production worker.....hp..	145	143	119	171	81	144	178	66
Prime movers.....1,000 hp..	1,653	1,610	232	199	33	1,141	1,102	39
Electric motors driven by purchased energy.....do....	993	872	251	93	158	586	390	196
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	388	388	-	-	-	244	244	-

See footnotes at end of table.

## Detailed Statistics, by Selected Types of Operation: 1963—Continued

Item	Producing establishments--Continued								Non-producing establishments	
	Treatment plants only	Underground mines by principal mining method (included in preceding columns)			Treatment plants by principal treatment method (included in preceding columns)					
		Open-stopping <sup>1</sup>	Sublevel caving	Block caving, shrinkage stopping, and other	Log washing	Heavy density separation	Agglomeration	Jigging and other		
.....number..	11	19	7	8	45	19	16	33	28	
.....do....	4	4	2	1	18	3	1	17	25	
.....do....	4	5	-	1	21	4	1	8	1	
over.....do....	3	10	5	6	6	12	14	8	2	
.....do....	-	19	7	8	43	12	11	31	28	
ts.....do....	11	6	2	4	45	19	16	33	4	
l <sup>2</sup> .....1,000 long tons..	-	6,607	2,465	5,802	20,226	29,825	49,574	13,756	432	
.....do....	-	3,526	1,578	529	310	411	-	791	-	
.....do....	-	3,081	887	5,273	19,916	29,414	49,574	12,965	432	
.....do....	12,272	5,922	2,885	2,721	11,733	14,254	28,145	8,297	-	
eipts, total.....\$1,000..	146,983	49,047	22,221	52,977	83,300	109,432	370,906	75,436	-	
ore, treated ores shipped to nd resales <sup>2</sup> .....do....	-	49,047	22,221	8,635	83,300	109,432	370,906	75,436	-	
ts.....do....	149,983			44,342					-	
.....do....	70,601	41,178	18,979	44,121	67,618	82,238	248,015	55,200	( <sup>6</sup> )	
.....number..	1,685	2,617	1,314	2,716	1,964	2,684	8,433	2,464	848	
and exploration workers	.....do....	1,334	2,314	1,178	2,433	1,713	2,401	7,007	2,192	727
.....do....	1,174	2,162	1,149	2,527	820	1,450	6,506	1,852	505	
.....do....	1,179	2,365	1,046	2,473	917	1,734	6,735	1,772	538	
.....do....	1,207	2,367	1,134	2,472	1,162	1,872	6,829	1,914	489	
.....do....	1,263	2,258	1,149	2,477	1,369	2,192	6,842	2,088	557	
.....do....	1,359	2,391	1,149	2,467	2,096	2,721	7,023	2,235	659	
.....do....	1,386	2,192	1,196	2,435	2,129	2,814	6,900	2,321	693	
.....do....	1,410	2,154	1,019	2,407	2,110	2,953	7,079	2,150	778	
.....do....	1,410	2,282	1,201	2,408	2,154	2,773	7,087	2,332	794	
.....do....	1,401	2,354	1,183	2,384	2,169	2,721	7,118	2,327	864	
.....do....	1,386	2,230	1,168	2,367	1,876	2,605	6,947	2,290	934	
.....do....	1,366	2,197	1,221	2,374	1,434	2,231	7,084	2,282	965	
.....do....	1,338	2,299	1,168	2,355	1,126	1,626	7,097	2,205	1,055	
.....do....	351	301	136	283	247	283	1,426	265	119	
mbers.....do....	-	2	-	-	4	-	-	7	2	
or.....do....	-	1	-	-	4	-	-	4	2	
ation, development, and	.....do....	2,654	4,181	2,024	4,382	3,239	4,676	13,809	4,109	1,461
al.....1,000..	-	3,791	1,978	3,788	2,574	3,790	7,014	3,047	1,305	
.....do....	-	2,916	1,566	3,049	-	643	2,410	1,536	666	
.....do....	-	27	-	-	2,169	1,944	2,856	750	331	
ine shops and yards).....do....	-	848	412	739	405	1,203	1,748	761	308	
.....do....	2,654	389	46	594	665	886	6,795	1,062	156	
ipment and exploration work	.....do....	17	74	144	113	178	123	1,172	152	189
nated below, total.....\$1,000..	90,878	27,016	12,086	26,328	28,339	49,983	193,782	37,818	55,723	
velopment, and exploration workers.....do....	8,361	15,404	7,425	14,262	8,815	15,998	44,408	13,615	4,508	
employees.....do....	3,120	2,696	1,207	2,389	2,295	2,466	12,949	2,441	854	
.....do....	71,545	5,832	2,362	5,306	13,040	25,897	62,685	17,883	8,057	
treatment or agglomeration.....do....	-	-	-	-	-	-	40,402	-	-	
.....do....	6,371	714	152	770	1,133	1,151	18,531	739	203	
rgy.....do....	1,459	2,073	931	2,666	1,657	3,105	8,068	2,155	497	
.....do....	22	297	9	934	1,399	1,366	7,139	1,485	41,604	
alled.....do....	4,396	553	21	1,333	2,659	3,887	11,464	1,125	7,003	
etal.....do....	7,411	1,600	233	2,153	4,206	8,212	25,383	2,711	51,726	
ration of mineral property.....do....	24	1,030	194	1,608	1,380	4,232	5,368	1,065	8,758	
ation plant construction and	.....do....	3,258	-	171	6	3,464	8,747	406	38,892	
ipment.....do....	4,032	494	20	278	889	456	11,063	865	4,076	
ent.....do....	97	76	18	96	1,931	60	204	375	-	
.....million kw.-hrs..	4,966	624	121	759	404	631	15,416	440	176	
.....do....	252	48	4	7	(Z)	1	951	4	2	
.....do....	69	27	5	34	132	211	296	62	10	
.....do....	83	11	16	213	4	1	1,663	58	8	
.....million cu. ft..	8,544	(Z)	6	-	17	24	11,656	7	204	
.....do....	161	84	25	116	719	448	943	257	51	
tributed.....\$1,000..	55	43	-	2	175	88	85	78	34	
ased.....million kw.-hrs..	112	177	51	250	101	219	831	166	46	
ed and used.....do....	672	-	-	-	-	-	1,746	-	-	
wer equipment (prime movers and i by purchased energy), total....1,000 hp..	272	201	73	152	345	347	1,047	320	164	
ter.....hp..	204	87	38	62	201	145	149	145	226	
.....do....	237	36	21	15	257	193	765	223	43	
en by purchased energy.....do....	35	165	52	137	88	154	282	97	121	
lectric motors driven by energy	.....do....	144	-	-	-	-	388	-	-	
olishment.....do....	-	-	-	-	-	-	-	-	-	

represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
of the unit of measure specified. <sup>1</sup>Includes data for one establishment with combination open-pit and underground mining methods.  
s iron ore valued chiefly for its iron content. <sup>2</sup>Includes iron ore shipped by establishments not classified in the iron ores industry.  
ses. \$23 349 thousand in salaries, at separately reported central offices and related facilities which were not classified by type of

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
INDUSTRY 1011.—IRON ORES											
Establishments.....number..	208	57	22	28	25	20	32	16	5	3	-
All employees:											
Total.....number..	123,083	73	157	412	761	1,331	4,699	5,204	8,332	(D)	-
Payroll.....\$1,000..	161,571	388	797	2,259	4,489	8,740	31,177	34,069	56,303	(D)	-
Production, development, and exploration workers:											
Total.....number..	18,102	45	118	315	683	1,157	4,190	4,613	6,981	(D)	-
Man-hours.....1,000..	34,524	86	217	664	1,466	2,248	7,543	8,759	13,521	(D)	-
Wages.....\$1,000..	112,781	223	543	1,540	3,801	7,170	26,339	29,049	44,116	(D)	-
Value added in mining.....do....	549,305	7,767	3,730	6,799	20,381	59,328	136,634	115,190	199,476	(D)	-
Value of shipments and receipts.....do....	762,234	9,611	4,482	12,590	41,819	72,986	163,147	161,501	296,098	(D)	-
Capital expenditures.....do....	96,644	284	472	421	3,350	1,053	47,909	17,630	25,525	(D)	-
Producing establishments by type of operation, total.....number..	180	40	15	27	25	19	31	16	4	3	-
Mines without treatment plants:											
Open-pit.....	45	26	6	5	1	5	1	-	-	1	-
Underground.....	22	4	1	1	2	2	9	3	-	-	-
Mines with treatment plants:											
Open-pit.....	90	9	7	18	18	10	17	9	1	1	-
Underground.....	11	1	-	-	1	1	1	4	3	-	-
Combination.....	1	-	-	-	-	-	1	-	-	-	-
Treatment plants only.....	11	-	1	3	3	1	2	-	-	1	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left. (NA) Not available. (X) Not applicable.

<sup>1</sup>Includes figures for separately reported central offices and related facilities. These were not distributed by employment size.

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1963 and 1958

(In thousands of dollars)

Ind. code	Industry and year	Value of shipments and receipts of establishments classified in the industry					Value of net shipments of primary products of the industry shipped by establishments in all industries		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total (produced in all industries)	Produced in the industry	Produced in other industries
1011	Iron ores.....1963..	762,234	(D)	(D)	1,234	(D)	706,468	(D)	(D)
	.....1958..	664,475	(D)	(D)	657	(D)	617,994	(D)	(D)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958

Product and geographic area	1963						1958					
	Production	Shipments including interplant transfers		Minerals treated			Production	Shipments including interplant transfers		Minerals treated		
		Quantity	Value	Produced and treated at same establishment	Received from other establishments for treatment			Quantity	Value	Produced and treated at same establishment	Received from other establishments for treatment	
					Quantity	Cost					Quantity	Cost
	(1,000 long tons)	(1,000 long tons)	(\$1,000)	(1,000 long tons)	(1,000 long tons)	(\$1,000)	(1,000 long tons)	(1,000 long tons)	(\$1,000)	(1,000 long tons)	(1,000 long tons)	(\$1,000)
United States, total:												
Crude iron ore, total <sup>1</sup> .....	152,504	41,058	134,300	112,441	30,082	52,220	108,142	50,571	311,060	58,818	19,935	57,360
Direct-shipping ore.....	12,403	13,581	91,926	(X)	(X)	(X)	32,804	34,036	278,549	(X)	(X)	(X)
Beneficiating-grade ore.....	140,101	27,477	42,374	112,441	30,082	52,220	75,338	16,535	32,511	58,818	19,935	57,360
Treated iron ores (including washed material), total.....	64,083	(D)	(D)	28,271	2,089	12,396	34,569	22,535	190,364	12,074	881	7,302
For consumption.....	34,789	34,296	260,559	(X)	(X)	(X)	20,819	20,781	176,325	(X)	(X)	(X)
For agglomeration.....	29,294	(D)	(D)	28,271	2,089	12,396	13,750	1,754	14,039	12,074	881	7,302
Iron agglomerates.....	26,586	26,660	353,983	(X)	(X)	(X)	13,298	13,204	163,120	(X)	(X)	(X)
Receipts for treating minerals on a custom or toll basis (included in value of treated ores and agglomerates above).....	(X)	(X)	4,861	(X)	(X)	(X)	(X)	(X)	1,451	(X)	(X)	(X)
Net production and shipments: <sup>2</sup>												
Iron ore.....	73,778	74,537	706,468	(X)	(X)	(X)	66,920	68,020	617,994	(X)	(X)	(X)
Manganiferous iron ore (included above)	(D)	418	2,753	(X)	(X)	(X)	437	409	3,042	(X)	(X)	(X)
Middle Atlantic:												
Crude iron ore.....	9,213	-	-	9,409	(D)	(D)	7,326	(D)	(D)	7,200	(D)	(D)
Treated iron ores, total.....	4,651	918	14,271	3,767	(D)	(D)	3,190	787	14,429	2,210	(D)	(D)
For consumption.....	885	918	14,271	(X)	(X)	(X)	809			(X)	(X)	(X)
For agglomeration.....	3,766	-	-	3,767	(D)	(D)	2,381	787	14,429	2,210	(D)	(D)
Iron agglomerates.....	4,074	4,085	60,153	(X)	(X)	(X)	2,239	2,236	31,627	(X)	(X)	(X)
Net iron ore production and shipments <sup>2</sup> ...	4,959	5,004	74,424	(X)	(X)	(X)	(NA)	(NA)	(NA)	(X)	(X)	(X)
New York:												
Net iron ore production and shipments <sup>2</sup> ...	2,354	2,388	29,376	1,930	-	-	2,122	1,938	24,162	1,671	(D)	(D)
North Central:												
Crude iron ore, total.....	120,759	38,688	118,687	82,860	(D)	(D)	86,010	41,386	236,287	44,068	16,486	32,973
Direct-shipping ore.....	10,182	11,343	76,890	(X)	(X)	(X)	27,155	26,608	212,729	(X)	(X)	(X)
Beneficiating-grade ore.....	110,577	27,345	41,797	82,860	(D)	(D)	58,855	14,778	23,558	44,068	16,486	32,973
Treated iron ores, total.....	50,363	(D)	(D)	22,994	(D)	(D)	25,926	17,894	143,980	(D)	(D)	(D)
For consumption.....	26,344	25,809	196,187	(X)	(X)	(X)	16,283			(X)	(X)	(X)
For agglomeration.....	24,019	(D)	(D)	22,994	(D)	(D)	9,643	17,894	143,980	(D)	(D)	(D)
Iron agglomerates.....	21,064	21,123	275,871	(X)	(X)	(X)	9,399	9,307	103,083	(X)	(X)	(X)
Net production and shipments: <sup>2</sup>												
Iron ore.....	57,590	58,276	548,948	(X)	(X)	(X)	52,837	(NA)	(NA)	(X)	(X)	(X)
Manganiferous iron ore (included above).	(D)	418	2,753	(X)	(X)	(X)	(NA)	(NA)	(NA)	(X)	(X)	(X)
Michigan:												
Crude iron ore.....	16,516	(D)	(D)	(D)	(D)	(D)	9,172	7,523	63,941	(D)	(D)	(D)
Net iron ore production and shipments <sup>2</sup> ...	10,381	10,802	105,343	(D)	(D)	(D)	8,509	8,254	71,738	-	(D)	(D)
Minnesota:												
Crude iron ore, total.....	102,867	31,452	66,212	(D)	28,652	40,935	74,862	32,953	164,577	42,080	16,089	29,552
Direct-shipping ore.....	5,293			(X)	(X)	(X)	18,400			(X)	(X)	(X)
Beneficiating-grade ore.....	97,574	31,452	66,212	(D)	28,652	40,935	56,462	32,953	164,577	42,080	16,089	29,552
Treated iron ores.....	41,480	24,940	185,780	(D)	(D)	(D)	24,691	16,422	129,492	(D)	(D)	(D)
Net iron ore production and shipments <sup>2</sup> ...	46,427	46,170	435,074	(X)	(X)	(X)	42,785	(NA)	(NA)	(X)	(X)	(X)
South:												
Crude iron ore, total.....	9,430	245	1,408	9,185	-	-	6,984	4,592	41,250	4,353	(D)	(D)
Direct-shipping ore.....	167			(X)	(X)	(X)	865			(X)	(X)	(X)
Beneficiating-grade ore.....	9,263	245	1,408	9,185	-	-	6,119	4,592	41,250	4,353	(D)	(D)
Net iron ore production and shipments <sup>2</sup> ...	3,288	3,273	22,898	(X)	(X)	(X)	(NA)	(NA)	(NA)	(X)	(X)	(X)
Alabama:												
Crude iron ore.....	5,462	133	904	5,328	-	-	5,093	4,528	41,008	37,499	( <sup>3</sup> )	(D)
Treated iron ores and agglomerates.....	1,950	1,977	13,536	-	-	-	3,800	2,484	33,955	( <sup>3</sup> )	( <sup>3</sup> )	(D)
Net iron ore production and shipments <sup>2</sup> ...	2,083	2,110	14,440	(X)	(X)	(X)	4,602	(NA)	(NA)	(X)	(X)	(X)
West:												
Crude iron ore, total.....	13,102	2,124	14,205	10,987	-	-	7,822	(NA)	(NA)	3,197	(D)	(D)
Direct-shipping ore.....	2,055			(X)	(X)	(X)		(NA)	(NA)	(X)	(X)	(X)
Beneficiating-grade ore.....	11,047	2,124	14,205	10,987	-	-	7,822	(NA)	(NA)	3,197	(D)	(D)
Net iron ore production and shipments <sup>2</sup> ...	7,941	7,984	60,198	(X)	(X)	(X)	(NA)	6,434	50,158	(X)	(X)	(X)
Utah:												
Crude iron ore.....	1,859	(D)	(D)	(D)	-	-	3,566	(NA)	(NA)	(NA)	(NA)	(NA)
Net iron ore production and shipments <sup>2</sup> ...	1,783	1,809	12,545	(X)	(X)	(X)	3,566	3,463	24,791	(X)	(X)	(X)
Nevada:												
Crude iron ore.....	1,032	(D)	(D)	1,031	-	-	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Net iron ore production and shipments <sup>2</sup> ...	760	760	3,989	(X)	(X)	(X)	647	594	3,626	(X)	(X)	(X)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Except for materials received from other establishments for treatment, represents only crude iron ores and manganiferous iron ores produced in the Iron Ores Industry.<sup>2</sup>Represents the sum of direct-shipping iron ore, treated iron ores for consumption, and iron agglomerates.<sup>3</sup>Figures for quantity of materials agglomerated are combined with figures for quantity of crude ore treated and figures for materials received from others are combined with figures for materials treated at the same establishments where mined.

**TABLE 6B. Product Classes—Indexes of Production and Unit Value for Primary Products Shipped by All Producers: 1963 and 1958**

Product code	Product and year	Indexes (1954 = 100)	
		Production	Unit value
1011	Iron ores.....1963..	106	119
	1958..	90	123
	Direct-shipping iron ore.....1963..	25	104
	1958..	67	125
	Treated iron ores for consumption.....1963..	148	110
	1958..	88	123
	Iron agglomerates.....1963..	481	116
	1958..	240	108

**TABLE 6C. Shipments of Primary Products Distributed by Value Per Long Ton: 1963**

Product and item	Shipments by average value per long ton f.o.b. mine or plant of— <sup>1</sup>									
	Total	Less than \$4.85	\$4.85 to \$6.14	\$6.15 to \$6.94	\$6.95 to \$7.84	\$7.85 to \$8.84	\$8.85 to \$9.99	\$10.00 to \$12.59	\$12.60 to \$14.19	\$14.20 and over
Direct shipping crude iron ores: <sup>2</sup>										
Quantity shipped.....1,000 long tons..	13,581	1,763	1,024	5,059	1,811	3,644	(D)	<u>280</u>	(D)	(D)
Percent of total.....	100.0	13.0	7.5	37.3	13.3	26.8	(D)	<u>2.1</u>	(D)	(D)
Value of shipments.....\$1,000..	91,926	6,528	6,186	32,936	13,613	29,607	(D)	<u>3,056</u>	(D)	(D)
Percent of total.....	100.0	7.1	6.7	35.9	14.8	32.2	(D)	<u>3.3</u>	(D)	(D)
Iron concentrates shipped to consumers: <sup>2</sup>										
Quantity shipped.....1,000 long tons..	34,296	824	3,259	3,304	18,648	5,680	(D)	<u>2,581</u>	(D)	(D)
Percent of total.....	100.0	2.4	9.5	9.6	54.4	16.6	(D)	<u>7.5</u>	(D)	(D)
Value of shipments.....\$1,000..	260,559	3,165	18,354	22,124	137,775	47,081	(D)	<u>32,060</u>	(D)	(D)
Percent of total.....	100.0	1.2	7.0	8.5	52.9	18.1	(D)	<u>12.3</u>	(D)	(D)
Iron agglomerates:										
Quantity shipped.....1,000 long tons..	26,660	(D)	-	-	-	(D)	-	<u>1,836</u>	21,703	3,121
Percent of total.....	100.0	(D)	-	-	-	(D)	-	<u>6.9</u>	81.4	11.7
Value of shipments.....\$1,000..	353,983	(D)	-	-	-	(D)	-	<u>19,269</u>	284,303	50,411
Percent of total.....	100.0	(D)	-	-	-	(D)	-	<u>5.4</u>	80.3	14.3

- Represents zero. (D) Withheld to avoid disclosure. Data for this item are included in the underscored figure on the same line.

<sup>1</sup>The "average values" are based on the entire shipments of the specified product by each establishment. Thus they are representative of varied average prices among establishments but not of variations within an establishment.

<sup>2</sup>Includes manganiferous iron ore valued chiefly for its iron content.

TABLE 7A. Supplies Used, by Geographic Areas and Type of Operation: 1963 and 1958

(For the quantity and cost of minerals received for treatment, see table 6A. For the quantity and total cost of purchased fuels and electric energy used, see tables 3A and 3B).

Supply used, geographic area, and type of operation	Unit of measure	1963		1958		Supply used, geographic area, and type of operation	Unit of measure	1963		1958	
		Quantity	Cost	Quantity	Cost			Quantity	Cost	Quantity	Cost
			(\$1,000)		(\$1,000)				(\$1,000)		(\$1,000)
<u>UNITED STATES</u>						<u>Type of Operation—Con.</u>					
Supplies used, total...		(X)	120,402	(X)	180,320	Producing establishments— Continued: Mines with treatment plants: Explosives..... Steel mill shapes and forms..... Open-pit: Explosives..... Steel mill shapes and forms..... Underground: Supplies used, total.. Explosives..... Steel mill shapes and forms..... All other supplies and undistributed.. Treatment plants only: Steel mill shapes and forms..... Underground mines by principal mining method: Open stoping: Supplies used, total.. Explosives..... Steel mill shapes and forms..... All other supplies.. Sublevel caving: Supplies used, total.. Explosives..... Steel mill shapes and forms..... All other supplies and undistributed.. Block caving, shrinkage stopping, and other: Supplies used, total.. Explosives..... Steel mill shapes and forms..... All other supplies.. Nonproducing establishments: Supplies used, total.. Explosives..... Steel mill shapes and forms..... All other supplies and undistributed....					
Explosives.....	1,000 lbs.	89,185	9,945	53,592	7,690		1,000 lbs.	62,467	6,225	29,785	3,976
Steel mill shapes and forms.....	Short tons	87,058	21,416	30,830	7,379		Short tons	31,895	6,121	15,013	2,996
All other supplies...		(X)	187,253	(X)	164,626		1,000 lbs.	50,593	5,140	24,650	2,808
Undistributed.....		(X)	1,788	(X)	625		Short tons	28,637	5,175	10,859	2,315
<u>Geographic Area</u>											
Middle Atlantic:											
Explosives.....	1,000 lbs.	6,786	1,198	5,197	1,051						
Steel mill shapes and forms.....	Short tons	3,509	998	2,910	579						
East North Central:											
Explosives.....	1,000 lbs.	11,912	1,566	(2)	(2)			(X)	8,324	(X)	(NA)
Steel mill shapes and forms.....	Short tons	21,527	2,514	(2)	(2)			1,000 lbs.	5,874	1,085	5,135
West North Central:								Short tons	3,258	946	4,154
Explosives.....	1,000 lbs.	51,648	5,739	237,578	25,297						681
Steel mill shapes and forms.....	Short tons	56,806	17,388	224,379	26,302			(X)	6,293	(X)	(NA)
All other supplies...		(X)	13,957	(X)	(NA)						
Minnesota:								Short tons	36,993	8,265	783
Explosives.....	1,000 lbs.	50,990	5,583	30,634	3,888						366
Steel mill shapes and forms.....	Short tons	43,254	11,745	12,414	3,131						
South and West:											
Explosives.....	1,000 lbs.	18,824	1,442	10,817	1,342			(X)	5,832	(X)	(NA)
Steel mill shapes and forms.....	Short tons	5,216	516	3,541	498			1,000 lbs.	4,250	833	7,529
<u>Type of Operation</u>								Short tons	4,530	808	5,185
Producing establishments:									(X)	4,191	(X)
Supplies used, total...		(X)	112,345	(X)	178,055						(NA)
Explosives.....	1,000 lbs.	87,722	9,752	53,043	7,632						
Steel mill shapes and forms.....	Short tons	76,066	17,095	27,099	6,422						
All other supplies...		(X)	183,721	(X)	163,407						
Undistributed.....		(X)	1,777	(X)	594						
Mines only:											
Supplies used, total...		(X)	17,554	(X)	(NA)						
Explosives.....	1,000 lbs.	25,255	3,527	23,258	3,656						
Steel mill shapes and forms.....	Short tons	7,578	2,709	11,303	3,060						
All other supplies...		(X)	11,049	(X)	(NA)						
Undistributed.....		(X)	269	(X)	(NA)						
Open-pit:											
Supplies used, total...		(X)	12,378	(X)	(NA)						
Explosives.....	1,000 lbs.	21,566	2,849	14,451	1,801						
Steel mill shapes and forms.....	Short tons	2,193	1,582	2,885	745						
All other supplies and undistributed.		(X)	7,947	(X)	(NA)						
Underground:											
Supplies used, total...		(X)	5,176	(X)	10,979						
Explosives.....	1,000 lbs.	3,689	678	8,807	1,855						
Steel mill shapes and forms.....	Short tons	5,385	1,127	8,418	2,315						
All other supplies...		(X)	3,371	(X)	6,809						

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

\*Includes the cost of products bought and resold without further processing.

\*Figures for East North Central are included with those for West North Central.

TABLE 7B. **Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954**

Industry and geographic area	Aggregate horsepower per production worker		1963 (1,000 hp.)									
			Aggregate horsepower (prime movers and electric motors driven by purchased energy)					Prime movers (horsepower)				
	1963	1954	Total	By type of equipment				Total	By type of equipment			
				Loading equipment	Transportation equipment		All other equipment		Loading equipment	Transportation equipment		All other equipment
Highway type	Other	Highway type	Other									
UNITED STATES, TOTAL.....	145	64	2,646	277	266	784	1,319	1,653	107	266	614	666
<u>Geographic Area</u>												
Middle Atlantic.....	73	54	219	29	25	37	128	38	7	26	4	1
North Central.....	169	67	2,122	195	156	671	1,100	1,416	60	155	551	650
Minnesota.....	188	82	1,558	147	108	563	740	1,175	50	108	507	510
South.....	95	48	114	31	38	17	28	82	29	38	7	8
West.....	140	94	191	22	47	59	63	117	11	47	52	7
<u>Type of Operation</u>												
Producing establishments, total.....	143	62	2,482	265	249	759	1,209	1,610	103	249	599	659
Open-pit mines <sup>1</sup> .....	176	84	1,784	197	205	615	767	1,301	86	205	561	449
Mines only.....	171	132	292	46	35	170	41	199	24	35	129	11
Mines with treatment plants.....	178	77	1,492	151	170	445	726	1,102	62	170	432	438
Underground mines <sup>2</sup> .....	72	40	426	61	28	130	207	72	10	28	25	9
Mines only.....	81	39	191	24	13	74	80	33	4	13	15	1
Mines with treatment plants.....	66	42	235	37	15	56	127	39	6	15	10	8
Treatment plants only.....	204	41	272	7	16	14	235	237	7	16	14	200
Agglomeration plants, with or without mines (included above).....	149	53	1,047	46	65	127	809	765	23	65	96	581
Nonproducing establishments.....	226	212	164	12	17	25	110	43	4	17	15	7
1963 (1,000 hp.)--Continued												
Prime movers (horsepower)--Continued				Electric motors (horsepower)								
By use				Total	By type of equipment				By source of power			
Driving generators	Not driving generators				Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated at same establishment			
UNITED STATES, TOTAL.....	682	971	1,381	183	168	1,030	993	388				
<u>Geographic Area</u>												
Middle Atlantic.....	3	35	181	22	33	126	181	-				
North Central.....	670	746	1,094	147	120	827	706	388				
Minnesota.....	537	638	716	107	57	552	383	333				
South.....	(2)	82	32	2	10	20	32	-				
West.....	9	108	74	12	5	57	74	-				
<u>Type of Operation</u>												
Producing establishments, total.....	677	933	1,260	175	158	927	872	388				
Open-pit mines <sup>1</sup> .....	483	818	727	122	52	553	483	244				
Mines only.....	-	199	93	22	41	30	93	-				
Mines with treatment plants.....	483	619	634	100	11	523	390	244				
Underground mines <sup>2</sup> .....	(2)	72	354	51	106	197	354	-				
Mines only.....	-	33	158	20	60	78	158	-				
Mines with treatment plants.....	-	39	196	31	46	119	196	-				
Treatment plants only.....	194	43	179	2	(2)	177	35	144				
Agglomeration plants, with or without mines (included above).....	388	377	670	38	31	601	282	388				
Nonproducing establishments.....	5	38	121	8	10	103	121	-				

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. (2) Less than 500 horsepower.

<sup>1</sup>For 1954, includes data for combination open-pit and underground mining establishments.

<sup>2</sup>For 1958, includes data for one combination open-pit and underground mining establishment.

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with average of—						
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
INDUSTRY 1011.—IRON ORES								
Establishments.....number..	208	132	20	32	16	5	3	-
Reporting water use, total.....do....	156	80	20	32	16	5	3	-
By source of water:								
Utility.....do....	46	16	7	16	6	1	-	-
Other than utility.....do....	93	47	13	16	10	4	3	-
Source not specified.....do....	17	17	-	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	60	50	8	2	-	-	-	-
1-5 million gallons.....do....	11	4	3	2	2	-	-	-
10-19 million gallons.....do....	8	3	-	4	1	-	-	-
20-99 million gallons.....do....	21	9	3	4	4	-	1	-
100 million gallons and over.....do....	56	14	6	20	9	5	2	-
Employees.....do....	120,969	1,403	1,331	4,699	5,204	8,332	(D)	-
Establishments reporting water use.....do....	20,774	1,208	1,331	4,699	5,204	8,332	(D)	-
Value added in mining.....\$1,000..	549,305	38,677	59,328	136,634	115,190	199,476	(D)	-
Value added at establishments reporting water use.....\$1,000..	547,595	36,967	59,328	136,634	115,190	199,476	(D)	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left. (NA) Not available. (X) Not applicable.

<sup>1</sup>Excludes figures for separately reported central offices and related facilities.



TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963

Industry, type of operation, and long tons per man-hour <sup>1</sup>	Establishments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expenditures
		Total	Payroll	Total	Man-hours	Wages			
	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
INDUSTRY 1011.—IRON ORES									
All establishments, total.....	208	<sup>2</sup> 23,083	<sup>2</sup> 161,571	18,102	34,524	112,781	549,305	762,234	96,644
Producing establishments:									
Mines only, total.....	67	4,589	30,273	4,062	7,230	25,437	101,812	123,160	4,406
Open-pits, total.....	45	1,987	13,432	1,713	3,303	10,836	54,657	69,672	1,863
0.30 to 0.99.....	3								
1.00 to 1.99.....	5	126	642	103	195	498	1,702	1,988	109
2.00 to 2.99.....	1								
3.00 to 3.99.....	2								
4.00 to 4.99.....	2	213	1,594	181	328	1,219	5,090	5,879	328
5.00 to 5.99.....	3	70	521	56	106	393	3,070	3,512	2
9.00 to 9.99.....	3	1,555	10,602	1,358	2,648	8,690	41,349	53,615	1,379
12.00 and over.....	3								
Undistributed <sup>3</sup> .....	23	23	73	15	27	36	3,446	4,678	45
Underground mines, total.....	22	2,602	16,841	2,349	3,927	14,601	47,155	53,488	2,543
1.00 to 1.19.....	1								
1.20 to 1.39.....	5	800	4,951	743	1,178	4,469	10,083	11,941	368
1.40 to 1.49.....	3	582	3,811	505	872	3,110	8,473	9,800	315
1.80 to 1.99.....	3	510	3,511	454	828	3,041	9,196	10,428	584
2.00 to 2.39.....	1								
2.40 to 2.79.....	1								
3.00 to 3.19.....	1	342	2,527	298	543	2,073	9,480	10,322	230
6.00 to 6.99.....	1								
Undistributed <sup>3</sup> .....	6	368	2,041	349	506	1,908	9,923	10,997	1,046
Mines with treatment plants, total.....	102	13,849	91,106	11,979	23,179	74,475	382,530	492,091	33,101
Open-pits, total.....	90	9,806	64,563	8,403	16,520	51,985	325,407	421,334	31,658
Less than 0.50.....	1								
0.50 to 0.99.....	9	211	823	194	465	725	1,713	2,552	278
1.00 to 1.49.....	11	1,187	7,413	1,105	2,258	6,884	24,600	32,866	3,352
1.50 to 1.99.....	7	878	5,496	699	1,220	3,938	14,259	21,754	516
2.00 to 2.39.....	6	2,813	19,474	2,234	4,400	14,200	94,269	123,902	4,813
2.40 to 2.79.....	3								
2.80 to 2.99.....	1	473	3,186	433	811	2,825	16,327	18,765	1,395
3.00 to 3.19.....	3	236	1,565	186	351	1,162	7,816	8,815	54
3.20 to 3.59.....	9	1,024	7,505	946	1,876	6,722	35,618	44,976	4,744
3.60 to 3.99.....	4	155	1,010	141	266	877	6,179	6,853	110
4.00 to 4.99.....	1								
5.00 to 5.99.....	3	350	2,384	309	592	1,978	18,522	20,412	1,719
6.00 to 6.99.....	3								
10.00 and over.....	2	481	3,063	413	704	2,204	30,482	35,885	2,239
Undistributed <sup>3</sup> .....	27	1,998	12,644	1,743	3,577	10,470	75,622	104,554	12,438
Underground mines, total.....	12	4,043	26,543	3,576	6,659	22,490	57,123	70,757	1,443
0.40 to 0.49.....	2								
0.50 to 0.59.....	1	1,531	10,089	1,331	2,482	8,287	19,934	24,353	711
0.60 to 0.69.....	2								
0.70 to 0.79.....	3	1,804	11,526	1,623	2,977	10,018	26,420	32,886	466
1.00 to 1.19.....	1								
1.20 to 1.39.....	1								
1.50 to 1.59.....	1	708	4,928	622	1,201	4,185	10,769	13,518	266
Undistributed <sup>3</sup> .....	1								
Treatment plants only <sup>4</sup> .....	11	1,685	11,481	1,334	2,654	8,361	70,601	146,983	7,411
Nonproducing establishments (undistributed) <sup>3</sup> ..	28	846	5,362	727	1,461	4,508	( <sup>5</sup> )	-	51,726

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Represents tons of primary products of the industry shipped per man-hour worked by production, development, and exploration workers.

<sup>2</sup>Includes employees at separately reported central offices and related facilities which were not distributed by type of operation.

<sup>3</sup>Represents establishments reporting no shipments of primary products, or no production, development, and exploration worker man-hours, or cost of contract work amounting to 30 percent or more of production, development, and exploration worker wages, or number of working proprietors amounting to 30 percent or more of number of production, development, and exploration workers, or man-hours spent on development and exploration work amounting to 30 percent or more of total man-hours worked by production, development, and exploration workers.

<sup>4</sup>Represents establishments with the following distribution of output per man-hour: Less than 1.00, 1 establishment; 1.00-1.99, 2 establishments; 3.00-3.99, 2 establishments; 4.00-4.99, 3 establishments; 10.00 and over, 3 establishments.

<sup>5</sup>Not shown since the cost of supplies, minerals received for preparation, fuels, purchased electric energy, contract work, and purchased machinery installed exceeded capital expenditures.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963

Ratio of payroll to value added in mining <sup>1</sup>	Establishments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expendi- tures
		Total	Payroll	Total	Man-hours	Wages			
	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
INDUSTRY 1011.—IRON ORES									
United States, total.....	208	23,083	161,571	18,102	34,524	112,781	549,305	762,234	96,644
Less than 0.10.....	16	485	3,029	420	749	2,308	69,842	75,619	869
0.10 to 0.19.....	35	5,907	40,475	4,841	9,557	30,535	248,511	345,883	23,068
0.20 to 0.29.....	27	3,427	23,170	3,099	6,164	20,601	89,067	125,152	9,204
0.30 to 0.39.....	35	4,124	25,866	3,605	6,609	21,582	74,798	108,004	7,872
0.40 to 0.49.....	20	2,403	15,109	2,097	3,747	12,432	33,123	47,593	1,603
0.50 to 0.59.....	9	1,104	7,241	1,009	1,939	6,281	13,180	17,815	398
0.60 to 0.69.....	7	2,136	14,311	1,863	3,577	11,858	22,225	35,843	1,625
0.70 to 0.79.....	3	293	1,961	268	512	1,748	2,484	1,849	39,987
0.80 to 0.89.....	2	97	591	74	140	375	655	899	34
0.90 to 0.99.....	2								
1.00 and over.....	10	289	2,035	236	378	1,543	1,703	2,633	460
Undistributed <sup>2</sup> .....	42	2,818	27,783	590	1,152	3,518	(3)	944	11,524
Middle Atlantic, total.....	13	3,387	21,859	2,982	5,624	18,386	55,598	74,045	2,615
Less than 0.29.....	2	4733	45,044	4677	41,336	44,492	417,055	424,926	41,734
0.30 to 0.39.....	3	2,075	12,822	1,810	3,442	10,640	33,429	41,874	822
0.40 to 0.49.....	2								
0.60 to 0.69.....	1	579	3,993	495	846	3,254	5,114	7,245	59
1.00 and over.....	2								
Undistributed <sup>2</sup> .....	3	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
North Central, total.....	107	16,099	113,036	12,555	23,820	78,921	431,828	603,540	88,272
Less than 0.10.....	14	6,292	42,934	5,181	10,165	32,406	312,096	413,791	23,898
0.10 to 0.19.....	26								
0.20 to 0.29.....	13	1,252	8,398	1,113	2,271	7,258	35,529	52,944	3,417
0.30 to 0.39.....	17	2,075	13,282	1,842	3,245	11,402	39,609	59,569	6,581
0.40 to 0.49.....	8	1,386	8,909	1,216	2,016	7,375	19,149	29,827	861
0.50 to 0.59.....	3	896	6,049	835	1,534	5,379	11,001	14,403	256
0.60 to 0.69.....	3	1,723	11,839	1,513	2,938	9,815	18,252	30,282	1,566
0.70 to 0.79.....	2	296	2,134	262	505	1,767	2,676	2,067	39,987
0.80 to 0.89.....	1								
1.00 and over.....	4	42	166	21	32	87	133	203	388
Undistributed <sup>2</sup> .....	16	2,137	19,325	572	1,114	3,432	(3)	454	11,318
South, total.....	49	1,376	7,015	1,204	2,350	5,819	16,702	23,262	932
Less than 0.19.....	7	43	127	34	52	98	861	939	36
0.20 to 0.29.....	6	304	1,262	260	399	1,061	4,331	6,017	230
0.30 to 0.39.....	12	714	4,106	652	1,340	3,605	9,673	13,402	379
0.40 to 0.49.....	6								
0.50 to 0.59.....	4	183	742	160	383	594	1,286	1,941	105
0.60 to 0.69.....	2								
0.70 to 0.79.....	1	106	487	95	164	413	504	852	61
0.90 to 0.99.....	1								
1.00 and over.....	3	26	291	3	12	48	47	111	121
Undistributed <sup>2</sup> .....	7								
West, total.....	39	1,610	11,760	1,361	2,730	9,655	45,177	61,387	4,825
Less than 0.10.....	2	57	443	46	89	339	5,396	6,772	3
0.10 to 0.19.....	2								
0.20 to 0.29.....	5	734	5,671	679	1,403	5,262	25,647	33,293	3,659
0.30 to 0.39.....	3	629	4,330	494	928	3,094	11,592	17,556	468
0.40 to 0.49.....	5	144	1,082	121	268	881	2,119	3,303	583
0.50 to 0.59.....	2								
0.60 to 0.69.....	1	14	106	7	18	47	121	132	32
0.80 to 0.89.....	1								
0.90 to 0.99.....	1								
1.00 and over.....	1								
Undistributed <sup>2</sup> .....	16	32	128	14	24	32	302	331	80

<sup>1</sup>In computing these ratios contract employment serving the establishment is excluded. The cost of contract work in the iron ores industry for 1963 was 34.4 percent of payroll.

<sup>2</sup>Represents establishments with zero or negative value added; establishments with no employees; and for number of employees and payroll, figures for separately reported central offices and related facilities.

<sup>3</sup>Not shown since the cost of supplies, minerals received for preparation, fuels, purchased electric energy, contract work, and purchased machinery installed exceeded capital expenditures.

<sup>4</sup>Figures for undistributed are included with those for "less than 0.29".

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963

Type of operation and value added per employee class <sup>1</sup>	Number of employees	Number of establishments with average employment of—							
		Total	6 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1011.—IRON ORES									
All establishments, total.....	223,083	208	107	25	20	32	16	5	3
Less than \$3,000.....	60	13	13	-	-	-	-	-	-
\$3,000 to \$3,999.....	27	3	3	-	-	-	-	-	-
\$4,000 to \$4,999.....	100	4	2	1	1	-	-	-	-
\$5,000 to \$5,999.....	40	5	4	1	-	-	-	-	-
\$6,000 to \$6,999.....	3	3	1	1	-	1	-	-	-
\$7,000 to \$7,999.....	264	1	1	-	-	-	-	-	-
\$8,000 to \$8,999.....	340	12	7	3	1	1	-	-	-
\$9,000 to \$9,999.....	245	9	7	1	-	1	-	-	-
\$10,000 to \$12,499.....	3,252	16	6	2	1	3	2	1	1
\$12,500 to \$14,999.....	2,521	15	5	1	1	2	5	1	-
\$15,000 to \$17,499.....	1,728	14	3	2	3	3	3	-	-
\$17,500 to \$19,999.....	1,744	7	-	1	2	2	1	1	-
\$20,000 and over.....	9,975	74	25	12	10	19	5	1	2
Negative value added.....	673	9	7	-	1	-	-	1	-
No employees.....	-	23	23	-	-	-	-	-	-
Producing establishments, total.....	20,123	180	82	25	19	31	16	4	3
Mines only:									
Open pits, total.....	1,987	45	37	1	5	1	-	-	1
\$3,000 to \$3,999.....	6	1	1	-	-	-	-	-	-
\$5,000 to \$5,999.....	24	2	2	-	-	-	-	-	-
\$7,000 to \$7,999.....	1	1	1	-	-	-	-	-	-
\$8,000 to \$8,999.....	3	3	3	-	-	-	-	-	-
\$9,000 to \$9,999.....	3	3	3	-	-	-	-	-	-
\$10,000 to \$12,499.....	1,461	3	2	-	-	-	-	-	1
\$12,500 to \$14,999.....	1	1	1	-	-	-	-	-	-
\$15,000 to \$17,499.....	196	1	1	-	-	-	-	-	-
\$17,500 to \$19,999.....	2	2	-	-	1	1	-	-	-
\$20,000 and over.....	300	13	8	1	4	-	-	-	-
No employees.....	-	15	15	-	-	-	-	-	-
Underground mines, total.....	2,602	22	6	2	2	9	3	-	-
\$8,000 to \$8,999.....	466	1	-	-	-	1	-	-	-
\$10,000 to \$12,499.....	3	3	1	-	-	2	-	-	-
\$12,500 to \$14,999.....	819	4	-	-	-	2	2	-	-
\$15,000 to \$17,499.....	711	3	-	-	-	2	1	-	-
\$17,500 to \$19,999.....	2	2	-	1	1	-	-	-	-
\$20,000 and over.....	7	3	1	1	2	-	-	-	-
Negative value added.....	606	1	1	-	-	-	-	-	-
No employees.....	1	1	1	-	-	-	-	-	-
Mines with treatment plants:									
Open pits, total.....	9,806	90	35	18	10	16	9	1	1
Less than \$3,000.....	119	2	2	-	-	-	-	-	-
\$4,000 to \$4,999.....	3	3	1	1	1	-	-	-	-
\$5,000 to \$5,999.....	80	3	3	-	-	-	-	-	-
\$6,000 to \$6,999.....	2	1	1	-	-	-	-	-	-
\$8,000 to \$8,999.....	179	7	3	3	1	-	-	-	-
\$9,000 to \$9,999.....	73	4	3	1	-	-	-	-	-
\$10,000 to \$12,499.....	343	6	3	2	-	-	1	-	-
\$12,500 to \$14,999.....	640	7	3	1	1	-	2	-	-
\$15,000 to \$17,499.....	912	7	2	2	2	1	-	-	-
\$17,500 to \$19,999.....	2	2	1	1	-	1	-	-	-
\$20,000 and over.....	7,460	46	13	6	5	15	5	1	1
No employees.....	-	1	1	-	-	-	-	-	-
Underground mines, total.....	4,043	12	1	1	1	3	5	1	-
\$6,000 to \$6,999.....	1	1	-	-	-	1	-	-	-
\$10,000 to \$12,499.....	2,344	1	-	-	-	-	1	-	-
\$12,500 to \$14,999.....	4	4	-	-	-	2	2	-	-
\$15,000 to \$17,499.....	774	3	-	-	1	-	2	-	-
\$17,500 to \$19,999.....	1	1	-	-	-	-	-	1	-
\$20,000 and over.....	925	1	-	1	-	-	-	-	-
Negative value.....	1	1	1	-	-	-	-	-	-
Treatment plants only, total.....	1,685	11	4	3	1	2	-	-	1
Less than \$3,000.....	1	1	1	-	-	-	-	-	-
\$3,000 to \$3,999.....	-	-	-	-	-	-	-	-	-
\$4,000 to \$4,999.....	-	-	-	-	-	-	-	-	-
\$5,000 to \$5,999.....	-	-	-	-	-	-	-	-	-
\$6,000 to \$6,999.....	89	-	-	-	-	-	-	-	-
\$7,000 to \$7,999.....	-	-	-	-	-	-	-	-	-
\$8,000 to \$8,999.....	-	-	-	-	-	-	-	-	-
\$9,000 to \$9,999.....	1	1	-	-	-	-	-	-	-
\$10,000 to \$12,499.....	1	1	1	-	1	-	-	-	-
\$12,500 to \$14,999.....	1	1	1	-	-	-	-	-	-
\$15,000 to \$17,499.....	-	-	-	-	-	-	-	-	-
\$17,500 to \$19,999.....	-	-	-	-	-	-	-	-	-
\$20,000 and over.....	1,596	7	1	3	-	2	-	-	-

See footnotes at end of table.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963—Continued

Type of operation and value added per employee class <sup>1</sup>	Number of employees	Number of establishments with average employment of—							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1011.—IRON ORES—Continued									
Nonproducing establishments, total..	846	28	25	-	1	1	-	1	-
Less than \$3,000.....	31	10	10	-	-	-	-	-	-
\$3,000 to \$3,999.....	158	2	2	-	-	-	-	-	-
\$4,000 to \$4,999.....		1	1	-	-	-	-	-	-
\$8,000 to \$8,999.....		1	1	-	-	-	-	-	-
\$9,000 to \$9,999.....		1	-	-	-	1	-	-	-
Negative value added.....	657	7	5	-	1	-	-	1	-
No employees.....	-	6	6	-	-	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>In computing these ratios, contract employment serving the establishment is excluded from payroll. The cost of contract work in the iron ores industry for 1963 was 34.4 percent of payroll.

<sup>2</sup>Includes figures for separately reported central offices and related facilities. These were not distributed by type of operation or value added per employee class.

TABLE 11. Hourly Earnings of Production, Development, and Exploration Workers for Establishments with 10 or More Employees: 1963

Industry by hourly earnings classes	Number of employees <sup>1</sup>	Number of establishments with 10 or more employees in-- :									
		Total	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
	INDUSTRY 1011.—IRON ORES										
Total.....	20,739	129	-	9	21	58	5	18	5	11	2
\$1.00 - \$1.49.....	192	8	-	-	-	1	2	5	-	-	-
\$1.50 - \$1.99.....	243	10	-	1	-	-	-	8	1	-	-
\$2.00 - \$2.49.....	187	10	-	-	-	2	3	3	2	-	-
\$2.50 - \$2.99.....	1,457	13	-	1	2	4	-	1	1	4	-
\$3.00 - \$3.49.....	14,245	56	-	6	6	38	-	1	1	4	-
\$3.50 - \$3.99.....	3,906	24	-	-	10	11	-	-	-	2	1
\$4.00 - \$4.49.....	72	3	-	-	1	-	-	-	-	-	1
\$4.50 and over.....	437	3	-	1	1	-	-	-	-	1	-
No production, development, or exploration workers.....		2	-	-	1	1	-	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Excludes figures for separately reported central offices and related facilities.

TABLE 12. Distribution of Operating Companies, by Employment Size and by Number of Establishments: 1963

Industry by establishment count	Number of--		Number of establishments with average employment of--									
	Operating companies	Employees <sup>1</sup>	Total	0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1011.—IRON ORES												
Total.....	115	20,969	208	57	22	28	25	20	32	16	5	3
Multunit companies, total.....	36	19,750	129	19	7	12	17	19	32	16	4	3
1 establishment <sup>2</sup> .....	14	628	14	3	2	2	4	3	-	1	-	-
2 establishments.....	6	1,588	12	2	-	1	3	2	1	3	-	-
3 or 4 establishments.....	7	2,460	24	5	1	6	4	4	2	-	2	-
5 or 6 establishments.....	4	2,535	23	4	1	1	3	1	11	2	-	-
7-9 establishments.....	3	12,587	25	-	1	2	2	3	8	4	1	3
15-19 establishments.....	2		31	5	2	-	2	6	9	6	1	-
Single unit companies.....	79	1,219	79	38	15	16	8	1	-	-	1	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Excludes figures for separately reported central offices and related facilities.

<sup>2</sup>Represents companies having at least one establishment classified in other industries.



## COPPER, LEAD, ZINC, GOLD, AND SILVER ORES

This report shows 1963 Census of Mineral Industries statistics for establishments classified in Industry Groups 102, Copper Ores; 103, Lead and Zinc Ores; and 104, Gold and Silver Ores. The separate industries included in these groups are as follows:

### SIC Code and Title

- 1021—Copper Ores
- 1031—Lead and Zinc Ores
- 1042—Lode Gold
- 1043—Placer Gold
- 1044—Silver Ores

### INDUSTRY DESCRIPTIONS

Industry 1021—Copper Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing copper ores. This industry also includes establishments primarily engaged in the recovery of copper concentrates by precipitation and leaching of copper ore. Establishments primarily engaged in the recovery of refined copper by leaching copper concentrates are classified in Major Group 33, Primary Metal Industries.

Industry 1031—Lead and Zinc Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing lead ores, zinc ores, or lead-zinc ores. Separate subindustry statistics are also shown throughout this report for the two subindustries, Lead Ores and Zinc Ores. These subindustries represent, respectively, establishments primarily engaged in producing ores valued chiefly for lead and for zinc.

Industry 1042—Lode Gold. This industry represents establishments primarily engaged in mining gold ores from lode deposits. In addition to ore dressing methods such as crushing, grinding, gravity concentration, and froth flotation, this industry includes amalgamation, cyanidation, and the production of bullion at the mine or mill site.

Industry 1043—Placer Gold. This industry represents establishments primarily engaged in recovery of gold from placer deposits by any method. This industry includes the production of bullion at the mine, mill, or dredge site.

Industry 1044—Silver Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing silver ores. The production of bullion at the mine or mill site is included.

Establishments producing complex ores were classified in these industries or subindustries on the basis of the relative values of metals contained (gross content) in the products of such establishments. For example, establishments were classified in the Copper Ores Industry if the estimated value of the gross copper content of minerals produced or shipped was greater than for any of the other metals contained. In order to arrive at this classification, unit values f.o.b. mine or mill for copper, lead, zinc, gold, and silver were applied to the reported gross metal content of products to derive the total

value for each metal contained. The individual unit values used were based on the f.o.b. mine or mill values of ores, concentrates, precipitates, and mill bullion reported in the 1958 Census of Mineral Industries, adjusted to reflect the changes in the metal prices between 1958 and 1963. These adjusted unit values f.o.b. mine or mill used for classification purposes in the 1963 minerals census were as follows:

Product	Estimated 1963 unit value f.o.b. mine or mill
Copper:	
Ores and concentrates.....	\$0.209 per pound
Precipitates.....	\$0.212 per pound
Lead ores and concentrates.....	\$0.080 per pound
Zinc ores and concentrates.....	\$0.050 per pound
Gold:	
Placer.....	\$34.70 per fine ounce
Mill bullion.....	\$35.00 per fine ounce
Concentrates.....	\$20.74 per fine ounce
Silver:	
Placer.....	\$1.143 per fine ounce
Mill bullion and concentrates.....	\$1.136 per fine ounce

## SUMMARY OF FINDINGS

The total value of shipments and receipts of the copper, lead, zinc, gold, and silver ores industries in the United States in 1963 was \$866 million. The total value of shipments and receipts of the Copper Ores Industry in 1963 amounted to \$670 million, of which the value of primary products of this industry was \$648 million. The total value of shipments and receipts of the Lead and Zinc Ores Industry in 1963 was \$136 million, of which primary products of the industry amounted to \$126 million. The total value of shipments and receipts in 1963 for Industry Group 104, Gold and Silver Ores, was \$60 million, of which primary products amounted to \$57 million. Of the total value of shipments and receipts for the latter group, the Lode Gold Industry accounted for almost \$27 million, the Placer Gold Industry for almost \$8 million, and the Silver Ores Industry for \$26 million.

The figures above represent gross value of shipments and receipts and contain duplication because of the inclusion of the value of minerals transferred between establishments within these industries for treatment, as well as the value of the materials treated from such transferred minerals. For the Copper Ores Industry in 1963, for example, the value of minerals transferred to other establishments for treatment was \$126 million, or 19 percent of the gross value of shipments. In the Lead and Zinc Ores Industry, the value of milling ores shipped was \$16 million, or 12 percent of the gross value of shipments. However, no milling ores were shipped in 1963 by the Gold and Silver Ores Industries. Separate figures for the value of gross and net shipments are given in tables 1, 3, and 5A of this report.

For the Copper Ores Industry, the production index for primary products of the industry increased to 142 in 1963 from the 1958 level of 117. The unit value index for 1963 was 95 compared to 80 for 1958. Both indexes were computed on a basis of 1954 = 100. For the Lead and Zinc Ores Industry, the 1963 production index was 89 compared with 91 for 1958. The comparable unit value index for 1963 was 90 compared with 82 for 1958. For the Gold and Silver Ores Industries, the 1963 production index was 101 compared with 103 for 1958 and the unit value index for 1963 was 109 compared with 99 for 1958.

The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments classified in the industry, but also their activities in the production of secondary products and in the performance of contract services for others. This situation should be taken into account in comparing industry statistics (tables 1 to 4 and 7 to 12) with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5A which shows the value of primary and secondary products shipped by establishments classified in the specified industry or subindustry and also the value of net shipments of primary products of the specified industry produced as secondary products by establishments classified in other industries.

Table 5B shows gross content of copper, lead, zinc, gold, and silver in minerals produced or shipped in all mineral industries, as well as the industry of origin. More than 97 percent of the gross copper content of minerals produced or shipped in the United States in 1963 was in products of the Copper Ores Industry, and all placer gold and silver were produced in the Placer Gold Industry. By contrast, only about 69 percent of gross lead content was in products of the Lead Ores Subindustry, only 79 percent of the gross zinc content was in products of the Zinc Ores Subindustry, 51 percent of the gold from lode deposits was in products of the Lode Gold Industry, and about 43 percent of the gross silver content was in the products of the Silver Ores Industry.

#### COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the Copper Ores, Lead and Zinc Ores, and Gold and Silver Ores Industries are comparable, in part, with statistics on these products published by the Bureau of Mines. The differences which occur result principally from differences in data collected, coverage, and objectives sought. The most nearly comparable statistics from the two bureaus are shown in the table below. Major reasons for the differences in product statistics are summarized below:

- (1) Census statistics on crude ores for these industries represent all ores mined by establishments classified in the Copper Ores, Lead and Zinc Ores, Lode Gold, and Silver Ores Industries, separate totals being available for each of the four industries. Figures do not include materials bearing such metals produced in other industries, nor do they differentiate between various types of ores which may be produced at the same establishment, such as lead ores which might be produced as a secondary product at an establishment classified in the Silver Ores Industry. Bureau of Mines figures for tonnage of crude ores represent ores of specified types (usually determined by assay content of the ores) irrespective of where these ores were produced. Nevertheless, as indicated in the table below, the Census Bureau figures based on a classification of all ores mined at each establishment are roughly comparable to the figures for groups of specified ores as tabulated by the Bureau of Mines.
- (2) Census figures for metals contained in all ores, concentrates, and bullion for 1963 represent gross metal content as reported by the respondent. Figures published by the Bureau of Mines represent recoverable metal content. This is the principal reason for the differences between the figures from the two bureaus shown below for metal content of copper, lead, zinc, gold, and silver bearing materials.
- (3) Census value figures represent reported values of ores, concentrates, and bullion f.o.b. mine or mill. Bureau of Mines value figures are estimated on the basis of recovered metals prices, thus measuring the value of these metals as they come from the smelter or refinery rather than at the mine and mill level.



(4) Bureau of the Census figures for milled or treated products include materials produced from foreign ores. Bureau of Mines product statistics represent domestic ores only.

(5) The Bureau of Mines excluded from its 1963 statistics shipments made in January of that year if such shipments had been included in their 1962 statistics. Likewise, any shipments actually made during 1962, but not included in Bureau of Mines figures for that year, were added to the 1963 figures. Census statistics represent only mine or mill shipments in 1963.

(6) The Bureau of Mines includes metals recovered at smelters from old slag and smelter cleanings if that metal was not included in their statistics for earlier years. Only metals contained in ores mined or milled in 1963 are included in Census statistics.

(7) The Bureau of the Census excludes small establishments whose value of shipments and reported costs of operation were both below \$500. The Bureau of Mines includes all reports obtained, regardless of size. However, the contribution to products of such establishments is very small.

(8) Some differences in the State statistics result from the assignment by the Bureau of Mines of concentrates produced in one State from ores mined in another to the State in which the mine is located. Census statistics include such concentrates in the State where the mill is located.

## 1963 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Unit of measure for "quantity"	Bureau of the Census statistics			Bureau of Mines statistics		
		Production (quantity)	Shipments including interplant transfers		Production (quantity)	Shipments	
			Quantity	Value (\$1,000)		Quantity (recoverable)	Value (\$1,000)
Copper, lead, zinc, gold, and silver ores (production and net shipments)...	1,000 short tons...	<sup>1</sup> 162,896	4,200	20,321	165,944	(NA)	(NA)
Metal content of copper, lead, zinc, gold, and silver-bearing materials: <sup>2</sup>							
Copper.....	1,000 pounds.....	2,441,016	(NA)	(NA)	2,426,332	(NA)	<sup>3</sup> 747,310
Lead.....	.....do.....	522,146	(NA)	(NA)	506,738	(NA)	<sup>3</sup> 54,727
Zinc.....	.....do.....	1,179,680	(NA)	(NA)	1,058,508	(NA)	<sup>3</sup> 122,533
Gold.....	1,000 fine ounces.....	1,437	(NA)	(NA)	1,454	(NA)	<sup>3</sup> 50,889
Silver.....	.....do.....	34,583	(NA)	(NA)	35,243	(NA)	<sup>3</sup> 45,076
Copper ores:							
Crude ore mined in the Copper Ores Industry (production and net shipments).....	Production--1,000 short tons of ores or concentrates.	145,312	copper- 2,170,200	{ 13,307 468,311	<sup>4</sup> 146,450 2,041,192	copper- <sup>2</sup> 2,178,499	{ (NA) (NA)
Copper concentrates.....		4,257					
Copper precipitates (Metal content).....		(NA)					
Lead and zinc ores:							
Crude ore mined in the Lead and Zinc Ores Industry (production and net shipments).....	Shipments--1,000 pounds of metal contained.	14,154	lead- 464,445 zinc- 1,173,693	{ 5,353 43,259 62,108	<sup>5</sup> 16,225 (NA) (NA)	lead- <sup>3</sup> 487,176 zinc- <sup>5</sup> 1,002,212	{ (NA) (NA) (NA)
Lead concentrates.....		329					
Zinc concentrates.....		882					
Lode gold:							
Crude ore mined in the Lode Gold Industry (production and net shipments).....	Production--1,000 short tons of ores or concentrates.	2,514	gold- 101.5 652.9	{ 315 3,722 22,933	<sup>6</sup> 2,682 (NA) (NA)	gold- <sup>7</sup> 87.7 <sup>8</sup> 655.5	{ (NA) (NA) (NA)
Gold concentrates.....		30					
Mill bullion.....		(NA)					
Placer gold.....	1,000 fine ounces.	193.7	193.7	6,791	185	(NA)	<sup>3</sup> 6,452
Silver ores:							
Crude ore mined in the Silver Ores Industry (production and net shipments).....	Production--1,000 short tons of ores or concentrates.	916	silver- 16,211	1,346 24,598	{ <sup>9</sup> 587 (NA)	silver- <sup>11</sup> 11,050	{ (NA) (NA)
Silver concentrates and mill bullion.....		<sup>10</sup> 64					

(NA) Not available.

<sup>1</sup>Represents only ores mined in the Copper Ores, Lead and Zinc Ores, Lode Gold, and Silver Ores Industries.

<sup>2</sup>Census quantity figures represent gross metal content, Bureau of Mines quantity figures represent recoverable metal content of mine production.

<sup>3</sup>Estimated by the Bureau of Mines from the quantity of mine production and an average price. For copper, lead, and zinc, represents the weighted average unit price of domestic refined metals delivered to purchasers. For gold, represents the price under authority of the Gold Reserve Act of January 31, 1944. For silver, represents the Treasury buying price for newly mined silver.

<sup>4</sup>Represents copper ore sold or treated.

<sup>5</sup>Represents lead ore, zinc ore, lead-zinc ore, and copper-lead, copper-zinc, and copper-lead-zinc ores.

<sup>6</sup>Represents gold ore and gold-silver ore produced.

<sup>7</sup>Represents metal contained in gold ore and gold-silver ore produced less mill bullion produced.

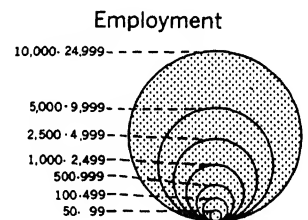
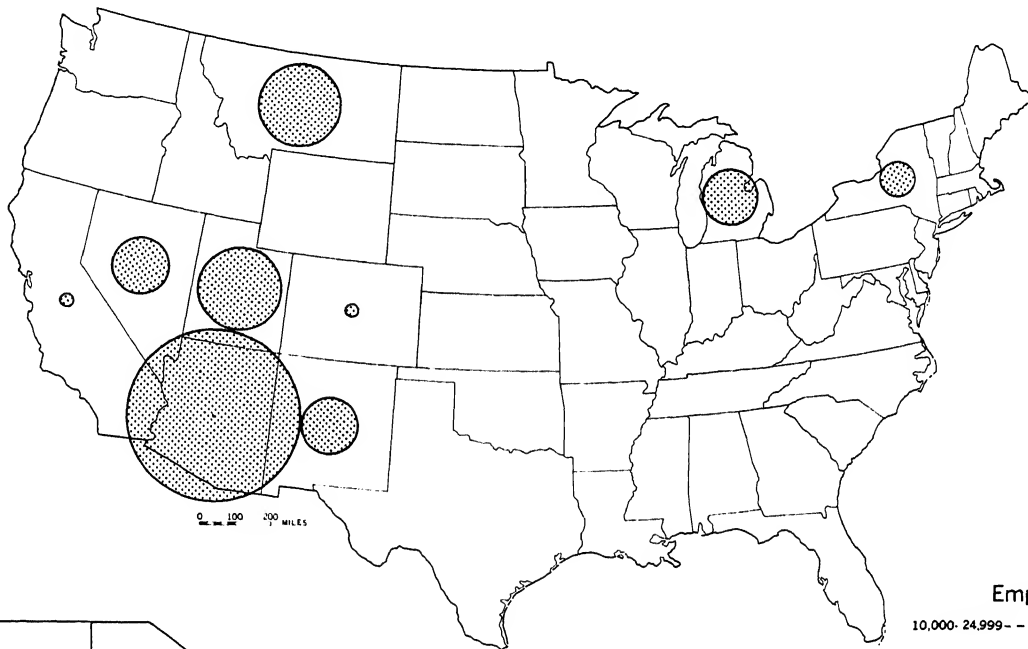
<sup>8</sup>Represents production.

<sup>9</sup>Represents silver ore produced.

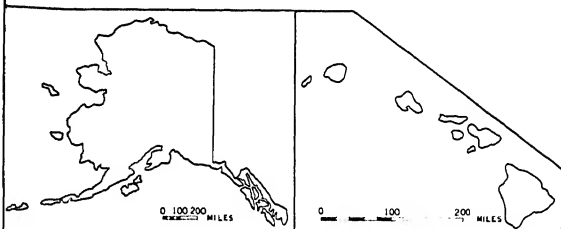


# COPPER ORES

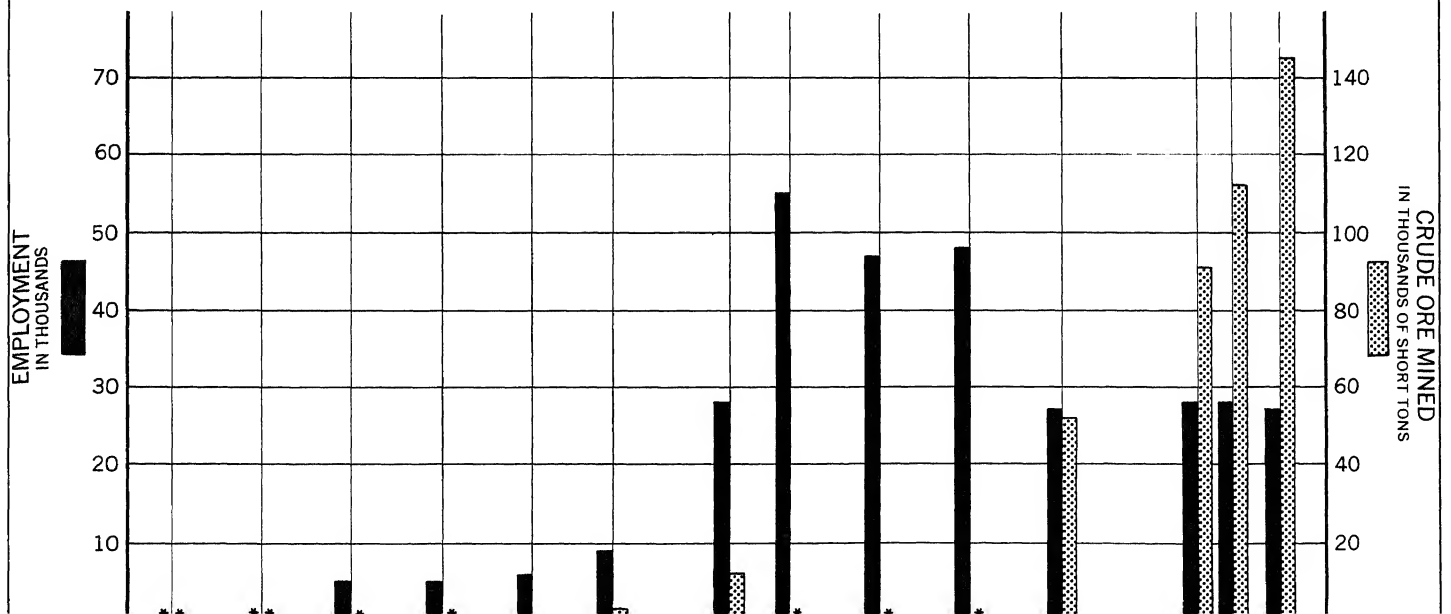
Distribution of Employment by State: 1963



No circle is shown for States with fewer than 50 employees.

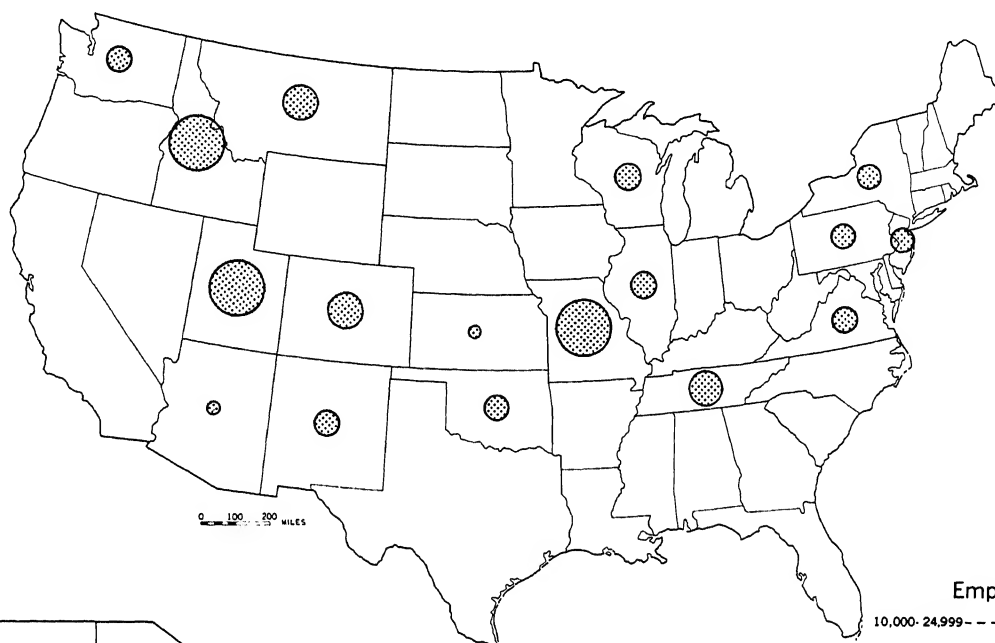


## Employment and Crude Ore mined: 1840-1963

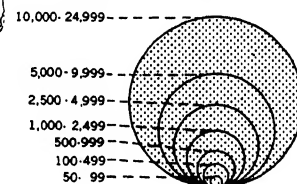


# LEAD AND ZINC ORES

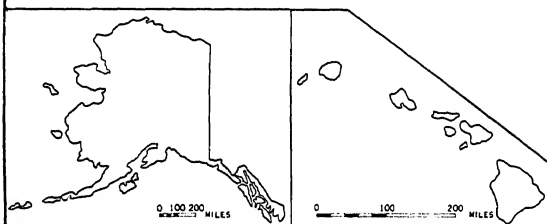
Distribution of Employment by State: 1963



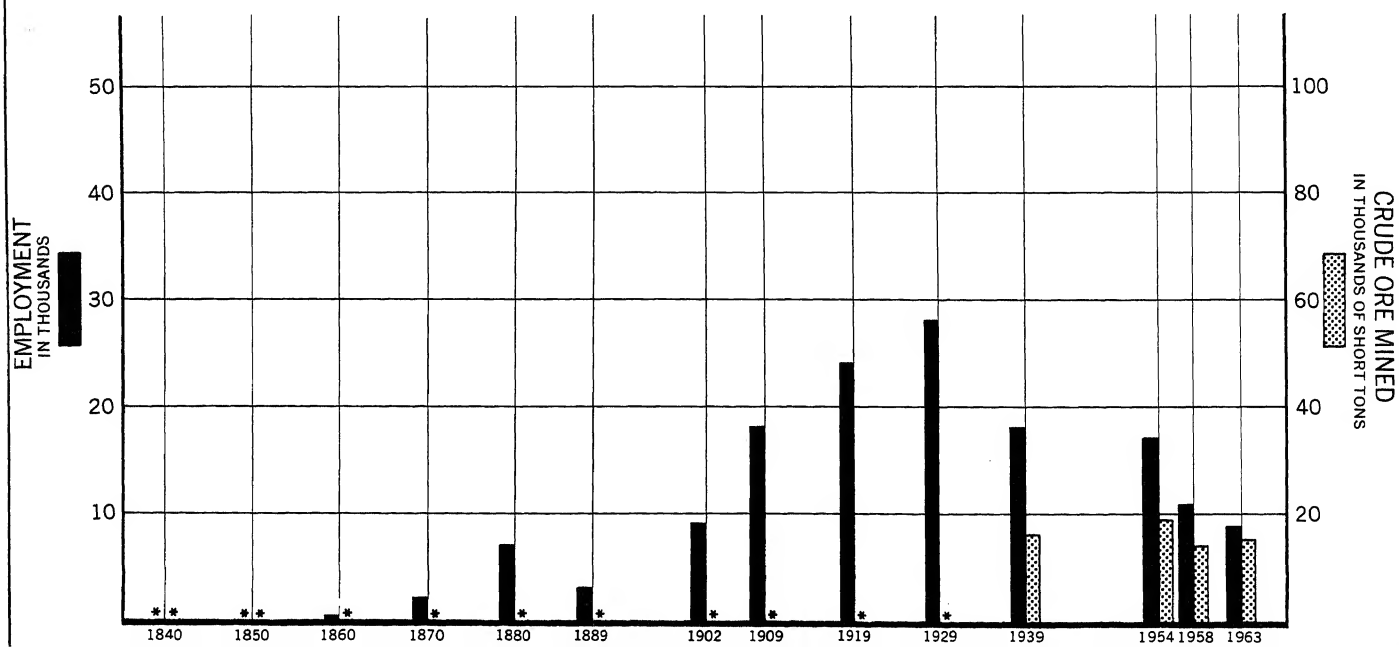
Employment



No circle is shown for States with fewer than 50 employees.

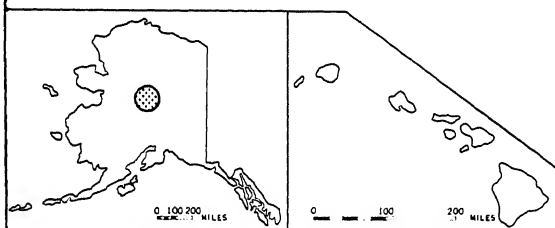
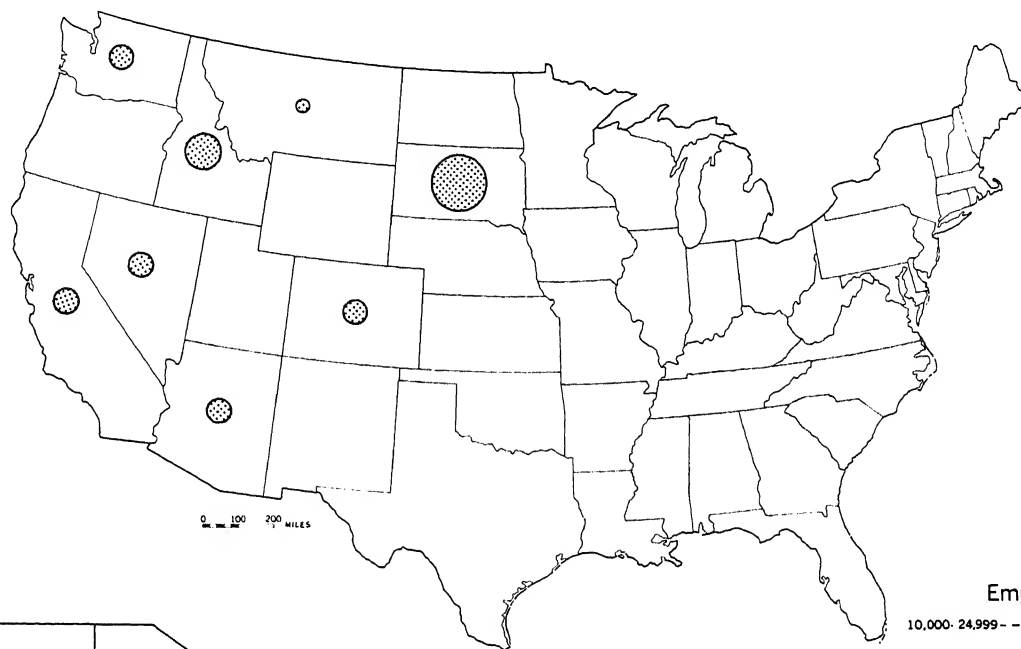


Employment and Crude Ore mined: 1840-1963

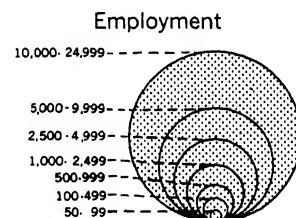


# GOLD AND SILVER ORES

## Distribution of Employment by State: 1963



No circle is shown for States with fewer than 50 employees.



## Employment and Crude Ore mined: 1840-1963

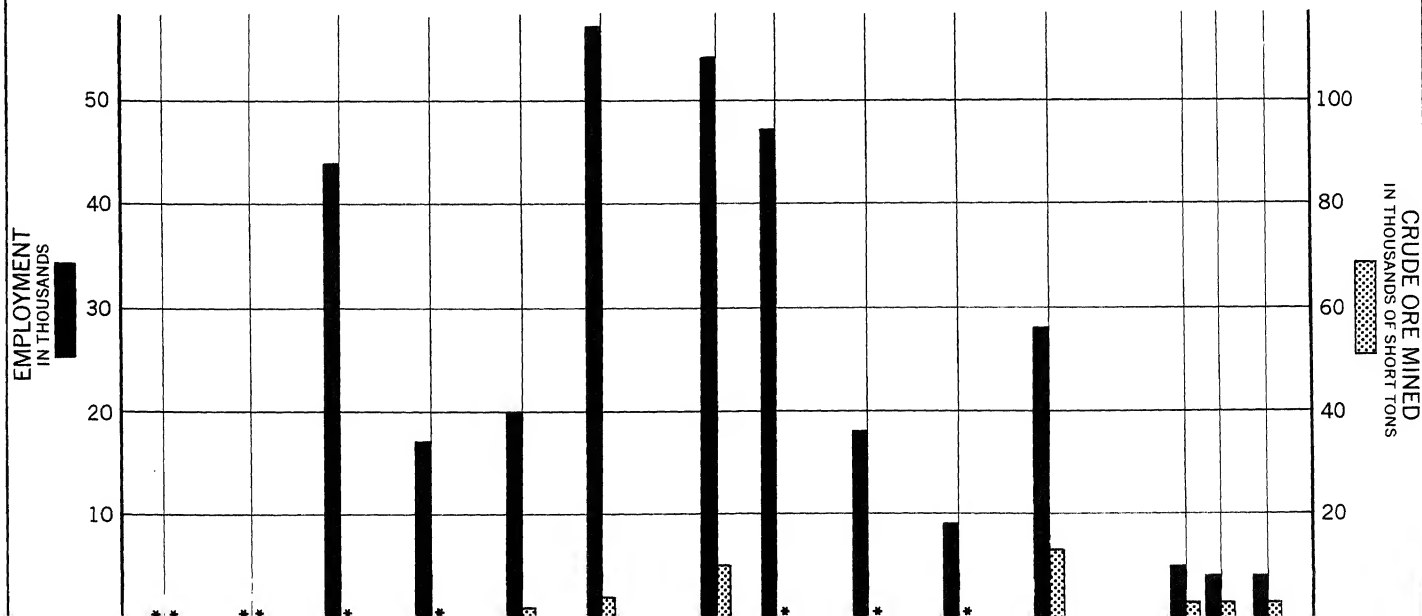


TABLE 1. General Statistics: 1963 and Earlier Years

Industry or subindustry and year	Operating companies  (number)	Establishments		All employees		Production, development, and exploration workers			Value added in mining (\$1,000)
		Total  (number)	With 20 employees or more	Total  (number)	Payroll (\$1,000)	Total  (number)	Man-hours (1,000)	Wages (\$1,000)	
COPPER, LEAD, ZINC, GOLD, AND SILVER ORES, TOTAL									
1963.....	728	831	102	40,124	261,441	32,779	67,705	200,349	550,488
1958 <sup>1</sup> .....	797	906	113	43,284	221,115	33,467	65,985	165,111	382,310
1954 <sup>2</sup> .....	1,264	1,425	156	50,014	232,690	40,023	85,442	173,412	484,450
1989 <sup>3</sup> .....	1,529	<sup>4</sup> 1,698	(NA)	72,109	113,049	64,683	142,459	93,737	260,566
1935 <sup>3</sup> .....	(NA)	<sup>4</sup> 12,198	(NA)	<sup>5</sup> 62,206	<sup>5</sup> 69,688	57,457	(NA)	59,947	151,929
1929 <sup>3</sup> .....	(NA)	1,502	(NA)	91,159	153,591	84,185	(NA)	133,549	322,000
1919.....	(NA)	2,307	(NA)	95,813	150,164	88,353	(NA)	133,095	230,328
1909 <sup>6</sup> .....	7,363	7,402	(NA)	122,534	122,047	115,166	(NA)	110,586	174,941
1902 <sup>3</sup> .....	6,985	<sup>4</sup> 6,987	(NA)	90,127	83,454	<sup>7</sup> 82,166	(NA)	73,367	109,819
1889.....	(NA)	(NA)	(NA)	69,343	49,217	65,167	(NA)	44,696	103,691
1880 <sup>6</sup> .....	(NA)	<sup>4</sup> 3,237	(NA)	33,966	18,742	31,960	(NA)	(NA)	83,360
1870 <sup>6</sup> .....	(NA)	2,544	(NA)	24,026	12,104	(NA)	(NA)	(NA)	28,450
1860 <sup>6</sup> .....	(NA)	7,298	(NA)	49,977	25,591	(NA)	(NA)	(NA)	34,575
1021.—COPPER ORES									
1963.....	118	160	41	26,486	187,307	21,372	45,319	142,395	417,089
1958 <sup>1</sup> .....	112	148	38	27,642	143,501	20,898	41,021	106,357	266,485
1954 <sup>2</sup> .....	179	210	41	27,813	136,065	21,544	46,676	98,491	334,876
1939 <sup>3</sup> <sup>8</sup> .....	35	<sup>6</sup> 51	(NA)	26,752	42,564	23,844	51,239	34,486	108,494
1929 <sup>3</sup> <sup>8</sup> .....	(NA)	143	(NA)	<sup>5</sup> 47,967	<sup>5</sup> 83,336	44,502	(NA)	73,200	221,690
1919 <sup>8</sup> <sup>9</sup> .....	(NA)	227	(NA)	48,741	78,329	45,440	(NA)	69,937	138,369
1909 <sup>6</sup> .....	196	223	(NA)	54,740	54,037	52,564	(NA)	50,145	86,415
1902.....	159	<sup>4</sup> 159	(NA)	27,572	23,169	<sup>7</sup> 26,309	(NA)	21,336	39,770
1889 <sup>10</sup> .....	(NA)	(NA)	(NA)	8,791	6,217	8,523	(NA)	5,810	15,285
1880 <sup>6</sup> .....	(NA)	<sup>4</sup> 42	(NA)	6,258	3,214	6,039	(NA)	(NA)	7,465
1870 <sup>6</sup> .....	(NA)	40	(NA)	5,404	2,706	(NA)	(NA)	(NA)	4,614
1860 <sup>6</sup> .....	(NA)	47	(NA)	5,153	1,816	(NA)	(NA)	(NA)	2,854
1031.—LEAD AND ZINC ORES									
1963, total.....	163	205	46	9,422	49,337	7,822	14,781	37,935	84,373
Lead ores.....	117	125	13	4,320	21,892	3,401	5,948	15,333	34,046
Zinc ores.....	50	80	33	5,102	27,445	4,421	8,833	22,602	50,327
1958, total <sup>1</sup> .....	226	288	52	11,227	54,397	8,728	16,734	39,001	73,679
Lead ores <sup>1</sup> .....	194	211	26	6,883	33,759	5,460	10,397	24,843	48,023
Zinc ores.....	42	77	26	4,344	20,638	3,268	6,337	14,158	25,656
1954, total.....	411	520	90	16,566	71,363	13,592	27,554	53,676	107,409
Lead ores.....	302	343	41	8,720	39,002	7,156	14,654	29,549	62,713
Zinc ores.....	118	177	49	7,846	32,361	6,436	12,900	24,127	44,696
1939, total <sup>8</sup> .....	208	<sup>4</sup> 260	(NA)	17,725	25,337	15,731	32,481	20,253	47,310
Lead ores.....	72	486	(NA)	8,052	12,841	7,041	14,194	9,979	24,277
Zinc ores.....	143	<sup>4</sup> 174	(NA)	9,673	12,496	8,690	18,287	10,274	23,033
1929, total <sup>8</sup> .....	(NA)	303	(NA)	<sup>5</sup> 27,725	<sup>5</sup> 44,244	25,907	(NA)	39,191	84,793
Lead ores.....	(NA)	155	(NA)	<sup>5</sup> 14,951	<sup>5</sup> 25,463	14,007	(NA)	22,917	51,738
Zinc ores.....	(NA)	148	(NA)	<sup>5</sup> 12,774	<sup>5</sup> 18,781	11,900	(NA)	16,274	33,055
1919 <sup>8</sup> .....	(NA)	432	(NA)	23,618	34,543	21,884	(NA)	30,708	53,623
1909 <sup>6</sup> <sup>11</sup> .....	1,040	1,040	(NA)	17,844	11,676	16,962	(NA)	10,564	21,855
1902 <sup>11</sup> .....	582	<sup>4</sup> 584	(NA)	8,886	5,215	7,952	(NA)	4,373	11,953
1889 <sup>12</sup> .....	(NA)	(NA)	(NA)	3,245	1,241	3,122	(NA)	1,159	4,361
1880 <sup>6</sup> <sup>13</sup> .....	(NA)	<sup>4</sup> 206	(NA)	7,483	2,640	7,063	(NA)	(NA)	3,505
1870, total <sup>6</sup> .....	(NA)	127	(NA)	1,714	601	(NA)	(NA)	(NA)	1,447
Lead ores.....	(NA)	112	(NA)	1,126	351	(NA)	(NA)	(NA)	698
Zinc ores.....	(NA)	15	(NA)	588	250	(NA)	(NA)	(NA)	749
1860 <sup>6</sup> .....	(NA)	43	(NA)	249	61	(NA)	(NA)	(NA)	179
104.—GOLD AND SILVER ORES									
1963, total.....	459	466	15	4,216	24,797	3,585	7,605	20,019	49,026
1042-Lode gold.....	199	201	5	2,397	13,861	2,091	4,544	11,422	21,312
1043-Placer gold.....	155	158	2	361	2,134	325	731	1,763	5,810
1044-Silver ores.....	105	107	8	1,458	8,802	1,169	2,330	6,834	21,904
1958, total <sup>1</sup> .....	466	470	23	4,415	23,213	3,841	8,230	19,753	42,146
Lode gold <sup>1</sup> .....	242	244	12	2,586	12,447	2,234	4,602	10,709	22,659
Placer gold.....	164	165	6	840	5,013	753	1,882	4,204	9,123
Silver ores.....	60	61	5	989	5,757	854	1,746	4,840	10,364
1954, total.....	669	695	25	5,635	25,262	4,887	11,212	21,245	42,165
Lode gold.....	301	313	15	3,060	12,475	2,670	5,988	10,600	22,003
Placer gold.....	271	281	7	1,320	6,749	1,152	3,010	5,642	10,306
Silver ores.....	98	101	3	1,255	6,038	1,065	2,214	5,003	9,856
1939, total <sup>3</sup> <sup>8</sup> .....	<sup>14</sup> 1,311	<sup>4</sup> 1,378	(NA)	27,586	45,088	25,075	58,665	38,953	104,798
Lode gold <sup>3</sup> .....	851	<sup>4</sup> 872	(NA)	19,254	31,375	17,591	41,522	27,304	66,523
Placer gold <sup>3</sup> .....	307	<sup>4</sup> 340	(NA)	3,705	6,794	3,228	8,088	5,632	21,935
Silver ores.....	153	<sup>4</sup> 166	(NA)	4,627	6,919	4,256	9,055	6,017	16,340

See footnotes at end of table.

TABLE 1. General Statistics: 1963 and Earlier Years—Continued

Industry or subindustry and year	Selected expenses				Value of shipments and receipts (\$1,000)	Value of net shipments and receipts (\$1,000)	Quantity of primary products <sup>1,2</sup> (1,000)	Capital expenditures (\$1,000)	Horsepower rating of power equipment (1,000)
	Supplies purchases for resale, and purchased fuels and electric energy (\$1,000)	Minerals received for treatment (\$1,000)	Contract work (\$1,000)	Purchased machinery installed (\$1,000)					
COPPER, LEAD, ZINC, GOLD, AND SILVER ORES, TOTAL									
1963.....	178,230	155,906	35,923	51,887	866,362	724,248	162,896	106,160	2,561
1958 <sup>1</sup> .....	146,678	111,618	25,802	23,793	632,896	531,554	129,216	57,305	(NA)
1954 <sup>2</sup> .....	134,524	137,088	50,753	31,789	740,282	16 603,927	112,281	98,322	2,615
1939 <sup>3</sup> .....	75,361	(NA)	2,165	(NA)	360,499	338,092	81,605	(NA)	1,551
1935 <sup>3</sup> .....	54,072	(NA)	(NA)	(NA)	(NA)	206,001	(NA)	(NA)	(NA)
1929 <sup>3</sup> .....	98,079	(NA)	5,752	20,506	(NA)	425,831	(NA)	(NA)	1,241
1919.....	99,488	6,602	3,702	(NA)	340,120	333,518	15 66,019	(NA)	1,010
1909 <sup>6</sup> .....	75,580	18,996	7,383	(NA)	276,900	257,904	(NA)	(NA)	810
1902 <sup>3</sup> .....	35,524	6,529	2,475	(NA)	154,347	148,260	(NA)	(NA)	492
1889.....	18,294	(NA)	1,790	(NA)	(NA)	123,775	(NA)	(NA)	114
1880 <sup>6</sup> .....	6,405	(NA)	(NA)	(NA)	(NA)	91,875	(NA)	(NA)	45
1870 <sup>6</sup> .....	4,729	(NA)	(NA)	(NA)	(NA)	33,179	(NA)	(NA)	13
1860 <sup>6</sup> .....	10 17,399	(10)	(NA)	(NA)	51,974	(NA)	(NA)	(NA)	(NA)
1021.—COPPER ORES									
1963.....	134,242	129,793	30,537	45,590	670,173	544,239	145,312	87,078	1,886
1958 <sup>1</sup> .....	105,807	89,011	22,024	19,191	457,644	374,428	111,937	44,874	(NA)
1954 <sup>2</sup> .....	87,676	100,693	43,873	23,821	508,729	409,911	90,992	82,210	1,546
1839 <sup>3</sup> 8.....	32,629	(NA)	511	(NA)	145,590	141,634	52,118	(NA)	753
1929 <sup>3</sup> 8.....	59,232	(NA)	2,595	13,084	(NA)	283,517	(NA)	(NA)	702
1919 <sup>8</sup> 9.....	52,002	1,528	876	(NA)	192,775	191,247	(NA)	(NA)	548
1909 <sup>6</sup> .....	37,410	10,597	664	(NA)	135,086	124,489	(NA)	(NA)	385
1902.....	11,219	20	189	(NA)	51,198	51,178	11,780	(NA)	199
1889 <sup>10</sup> .....	4,068	(NA)	334	(NA)	(NA)	19,687	3,323	(NA)	34
1880 <sup>6</sup> .....	1,392	(NA)	(NA)	(NA)	(NA)	8,857	1,007	(NA)	14
1870 <sup>6</sup> .....	587	(NA)	(NA)	(NA)	(NA)	5,201	(NA)	(NA)	6
1860 <sup>6</sup> .....	17 507	(17)	(NA)	(NA)	3,361	(NA)	(NA)	(NA)	(NA)
1031.—LEAD AND ZINC ORES									
1963, total.....	29,515	26,113	3,588	4,272	135,965	119,785	14,154	11,896	435
Lead ores.....	17 18,378	(17)	2,531	1,896	50,743	44,750	4,563	6,108	207
Zinc ores.....	17 37,250	(17)	1,057	2,376	85,222	75,035	9,591	5,788	228
1958, total <sup>1</sup> .....	28,112	21,517	2,952	2,920	120,561	103,843	14,405	8,619	(NA)
Lead ores <sup>1</sup> .....	16,985	11,353	2,108	1,630	75,603	68,144	8,761	4,496	(NA)
Zinc ores.....	11,127	10,164	844	1,290	44,958	35,699	5,644	4,123	(NA)
1954, total.....	32,920	35,116	6,080	5,942	175,947	140,132	18,526	11,520	750
Lead ores.....	17,417	14,197	2,829	2,878	94,874	77,201	9,698	5,160	423
Zinc ores.....	15,503	20,919	3,251	3,064	81,073	62,931	8,828	6,360	327
1939, total <sup>8</sup> .....	14,978	(NA)	363	(NA)	72,648	62,651	16,318	(NA)	353
Lead ores.....	7,041	(NA)	149	(NA)	34,517	31,467	6,979	(NA)	194
Zinc ores.....	7,937	(NA)	214	(NA)	38,131	31,184	9,339	(NA)	159
1929, total <sup>8</sup> .....	25,982	(NA)	1,653	3,752	(NA)	112,428	(NA)	(NA)	358
Lead ores.....	14,792	(NA)	1,032	1,904	(NA)	67,562	(NA)	(NA)	194
Zinc ores.....	11,190	(NA)	621	1,848	(NA)	44,866	(NA)	(NA)	164
1919 <sup>8</sup> .....	20,687	406	863	(NA)	75,579	75,173	(NA)	(NA)	230
1909 <sup>6</sup> 11.....	7,300	1,947	261	(NA)	31,363	29,416	(NA)	(NA)	114
1902 <sup>11</sup> .....	2,530	73	117	(NA)	14,673	14,600	(NA)	(NA)	42
1889 <sup>12</sup> .....	408	(NA)	35	(NA)	(NA)	4,804	(NA)	(NA)	1
1880 <sup>6</sup> 13.....	332	(NA)	(NA)	(NA)	(NA)	3,837	(NA)	(NA)	7
1870, total <sup>6</sup> .....	78	(NA)	(NA)	(NA)	(NA)	1,525	(NA)	(NA)	1
Lead ores.....	38	(NA)	(NA)	(NA)	(NA)	736	(NA)	(NA)	(2)
Zinc ores.....	40	(NA)	(NA)	(NA)	(NA)	789	(NA)	(NA)	1
1860 <sup>6</sup> .....	17 231	(17)	(NA)	(NA)	410	(NA)	(NA)	(NA)	(NA)
104.—GOLD AND SILVER ORES									
1963, total.....	17 14,473	(17)	1,798	2,025	60,224	60,224	3,430	7,186	240
1042-Lode gold.....	6,744	-	925	484	26,632	26,632	2,514	2,859	83
1043-Placer gold.....	1,999	-	340	372	7,532	7,532	1 193.7	989	100
1044-Silver ores.....	17 5,730	(17)	533	1,169	26,060	26,060	916	3,338	57
1958, total <sup>1</sup> .....	12,756	1,090	826	1,682	54,691	53,283	16 2,854	3,812	(NA)
Lode gold <sup>1</sup> .....	177,384	(17)	427	764	29,506	28,234	2,358	1,728	(NA)
Placer gold.....	3,570	(X)	246	617	12,628	12,628	15 362.1	928	(NA)
Silver ores.....	17 2,895	(17)	153	301	12,557	12,421	496	1,156	(NA)
1954, total.....	13,928	1,279	800	2,026	55,606	16 53,724	2,763	4,592	320
Lode gold.....	11,385	1,274	436	915	28,677	326,892	2,249	2,183	135
Placer gold.....	2,543	(X)	364	665	14,781	14,781	18 416.2	1,343	149
Silver ores.....	2,543	5	364	446	12,148	12,051	514	1,066	36
1939, total <sup>3</sup> 8.....	27,728	(NA)	1,281	(NA)	142,261	133,807	13,169	(NA)	445
Lode gold <sup>3</sup> .....	18,521	(NA)	1,020	(NA)	92,942	86,064	11,343	(NA)	291
Placer gold <sup>3</sup> .....	5,951	(X)	141	(NA)	28,027	28,027	15 824.6	(NA)	110
Silver ores.....	3,256	(NA)	120	(NA)	21,292	19,716	1,826	(NA)	44

See footnotes at end of table.



TABLE 1. General Statistics: 1963 and Earlier Years—Continued

Industry or subindustry and year	Operating companies  (number)	Establishments		All employees		Production, development, and exploration workers			Value added in mining  (\$1,000)
		Total  (number)	With 20 employees or more	Total  (number)	Payroll  (\$1,000)	Total  (number)	Man-hours  (1,000)	Wages  (\$1,000)	
104.—GOLD AND SILVER ORES—Continued									
1929, total <sup>3</sup> .....	(NA)	273	(NA)	<sup>5</sup> 9,277	<sup>5</sup> 15,951	8,524	(NA)	13,953	20,186
Lode gold <sup>3</sup> .....	(NA)	174	(NA)	<sup>5</sup> 5,796	<sup>5</sup> 9,787	5,353	(NA)	8,656	11,713
Placer gold <sup>3</sup> .....	(NA)	32	(NA)	<sup>5</sup> 668	<sup>5</sup> 1,230	578	(NA)	970	2,582
Silver ores .....	(NA)	67	(NA)	<sup>5</sup> 2,813	<sup>5</sup> 4,934	2,593	(NA)	4,327	5,891
1919, total <sup>3</sup> .....	(NA)	1,148	(NA)	18,922	30,400	17,338	(NA)	26,813	44,499
Lode gold and silver ores <sup>3</sup> .....	(NA)	740	(NA)	16,819	26,824	15,436	(NA)	23,818	35,927
Placer gold .....	(NA)	408	(NA)	2,103	3,576	1,902	(NA)	2,995	8,572
1909, total <sup>6</sup> .....	6,127	6,139	(NA)	49,950	56,334	45,640	(NA)	43,296	66,671
Lode gold and silver ores <sup>11</sup> .....	4,717	4,729	(NA)	44,176	48,367	40,299	(NA)	42,565	50,053
Placer gold .....	1,410	1,410	(NA)	5,774	7,967	5,341	(NA)	7,312	16,618
1902, total <sup>3</sup> .....	6,244	<sup>4</sup> 6,244	(NA)	53,669	55,070	<sup>7</sup> 47,905	(NA)	47,658	58,096
Lode gold and silver ores <sup>3 11 19</sup> .....	5,269	<sup>4</sup> 5,269	(NA)	51,073	52,927	<sup>7</sup> 45,584	(NA)	45,839	53,579
Placer gold <sup>3 19</sup> .....	975	<sup>4</sup> 975	(NA)	2,596	2,143	<sup>7</sup> 2,321	(NA)	1,819	4,517
1889 .....	(NA)	<sup>4</sup> 4,750	(NA)	57,307	41,759	53,522	(NA)	37,727	84,045
1880, total <sup>6</sup> .....	(NA)	<sup>4</sup> 2,989	(NA)	20,225	12,888	18,858	(NA)	(NA)	<sup>20</sup> 72,390
Lode gold and silver ores .....	(NA)	<sup>4</sup> 2,640	(NA)	<sup>21</sup> 19,147	<sup>21</sup> 12,261	17,780	51,966	(NA)	62,390
Placer gold .....	(NA)	<sup>4</sup> 349	(NA)	1,078	627	1,078	(NA)	627	(NA)
1870, total <sup>6</sup> .....	(NA)	2,377	(NA)	16,908	8,797	(NA)	(NA)	(NA)	22,389
Lode gold <sup>22</sup> .....	(NA)	281	(NA)	5,411	4,576	(NA)	(NA)	(NA)	11,713
Placer gold <sup>22</sup> .....	(NA)	1,994	(NA)	10,441	3,379	(NA)	(NA)	(NA)	7,917
Silver ores .....	(NA)	102	(NA)	1,056	842	(NA)	(NA)	(NA)	2,759
1860, total <sup>6</sup> .....	(NA)	7,208	(NA)	44,575	23,714	(NA)	(NA)	(NA)	31,542
Lode and placer gold <sup>22</sup> .....	(NA)	7,202	(NA)	44,316	23,662	(NA)	(NA)	(NA)	30,601
Silver ores .....	(NA)	6	(NA)	259	52	(NA)	(NA)	(NA)	941

Note: For explanation of column captions see appendix A. For more detailed historical statistics for these industries see table 1 of the corresponding chapter of the 1954 Census of Mineral Industries, Vol. I.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

(2) Less than 500 hp.

<sup>1</sup>Excludes data for copper ores, lead ores, and lode gold in Alaska. For 1958 the following numbers of establishments were reported in Alaska: copper ores, 9 (with 6 employees); lead ores, 2 (with 0-4 employees); lode gold, 7 (with 0-4 employees).

<sup>2</sup>Excludes data for 2 copper ores establishments in Alaska with less than 15 employees.

<sup>3</sup>Excludes data for Alaska. For 1919, data for lode gold mining in Alaska are included with those for copper ores.

<sup>4</sup>Represents number of mines.

<sup>5</sup>Excludes data for central administrative offices operated separately from mines or plants.

<sup>6</sup>Includes some smelting and refining operations. For 1909, production, development, and exploration workers at copper smelters represented about 13 percent of the total shown for such workers in the Copper Ores Industry, and production, development, and exploration workers at lead and zinc smelters and refineries represented about 3 percent of the total shown for such workers in the Lead and Zinc Ores Industry.

<sup>7</sup>Figures for average employment were reduced to a 300-day basis for establishments which operated for a shorter period.

<sup>8</sup>Excludes some nonproducing operations for which statistics are available only for the copper, lead, zinc, gold, and silver ores industries as a group. For 1939, 9 such nonproducing operations with 46 employees and with wages, salaries, and selected expenses of \$92 thousand were reported. For 1929, 783 such establishments were reported with wages, salaries, and selected expenses of \$13,128 thousand; and for 1919 there were 500 such establishments with such expenses of \$13,055 thousand.

<sup>9</sup>Includes data for lode gold and other lode mines in Alaska.

<sup>10</sup>Represents statistics for Michigan, Montana, New Mexico, and Arizona only. Over 90 percent of the copper contained in copper ores was produced in these States.

<sup>11</sup>Data for establishments primarily producing argentiferous lead and zinc ores are included with those for gold and silver ores.

TABLE 1. General Statistics: 1963 and Earlier Years—Continued

Industry or subindustry and year	Selected expenses				Value of shipments and receipts (\$1,000)	Value of net shipments and receipts (\$1,000)	Quantity of primary products <sup>1,5</sup> (1,000)	Capital expenditures (\$1,000)	Horsepower rating of power equipment (1,000)
	Supplies, purchases for resale, and purchased fuels and electric energy (\$1,000)	Minerals received for treatment (\$1,000)	Contract work (\$1,000)	Purchased machinery installed (\$1,000)					
	104.—GOLD AND SILVER ORES—Continued								
1929, total <sup>3 8</sup> .....	9,004	(NA)	696	1,868	(NA)	29,886	(NA)	(NA)	119
Lode gold <sup>3</sup> .....	5,381	(NA)	556	1,085	(NA)	17,650	(NA)	(NA)	70
Placer gold <sup>3</sup> .....	1,195	(X)	2	359	3,779	3,779	(NA)	(NA)	20
Silver ores.....	2,428	(NA)	138	424	(NA)	8,457	(NA)	(NA)	29
1919, total <sup>3 8</sup> .....	21,229	4,668	1,370	(NA)	71,766	67,098	(NA)	(NA)	191
Lode gold and silver ores <sup>3</sup> .....	17,000	4,668	1,237	(NA)	58,832	54,164	(NA)	(NA)	150
Placer gold.....	4,229	(X)	133	(NA)	12,934	12,934	<sup>2 3</sup> 651.4	(NA)	41
1909, total <sup>6</sup> .....	30,870	6,452	6,458	(NA)	110,451	103,999	(NA)	(NA)	311
Lode gold and silver ores <sup>11</sup> .....	26,155	6,452	4,792	(NA)	87,452	81,000	(NA)	(NA)	271
Placer gold.....	4,715	(X)	1,666	(NA)	22,999	22,999	(NA)	(NA)	40
1902, total <sup>3</sup> .....	21,775	6,436	2,169	(NA)	88,476	82,482	9,788	(NA)	252
Lode gold and silver ores <sup>3 11 19</sup> .....	20,984	6,436	2,149	(NA)	83,148	77,154	<sup>2 4 9</sup> 788	(NA)	241
Placer gold <sup>3 19</sup> .....	791	(X)	20	(NA)	5,328	5,328	<sup>1 5</sup> 259.1	(NA)	11
1889.....	13,818	(NA)	1,421	(NA)	(NA)	99,284	4,578	(NA)	78
1880, total <sup>6</sup> .....	<sup>2 5 4</sup> 6,681	(NA)	(NA)	(NA)	(NA)	79,181	2,216	(NA)	<sup>1 3</sup> 24
Lode gold and silver ores.....	4,681	(NA)	(NA)	(NA)	(NA)	67,071	2,216	(NA)	24
Placer gold.....	(NA)	(X)	(NA)	(NA)	12,110	12,110	<sup>1 5</sup> 580.8	(NA)	(NA)
1870, total <sup>6</sup> .....	4,064	(NA)	(NA)	(NA)	(NA)	26,453	(NA)	(NA)	6
Lode gold <sup>22</sup> .....	1,716	(NA)	(NA)	(NA)	(NA)	13,429	(NA)	(NA)	5
Placer gold <sup>22</sup> .....	1,858	(X)	(NA)	(NA)	(NA)	9,775	(NA)	(NA)	1
Silver ores.....	490	(NA)	(NA)	(NA)	(NA)	3,249	(NA)	(NA)	(Z)
1860, total <sup>6</sup> .....	<sup>1 7</sup> 16,661	(17)	(NA)	(NA)	48,203	(NA)	(NA)	(NA)	(NA)
Lode and placer gold <sup>22</sup> .....	<sup>1 7</sup> 16,562	(17)	(NA)	(NA)	47,163	(NA)	(NA)	(NA)	(NA)
Silver ores.....	<sup>1 7 9 9</sup>	(17)	(NA)	(NA)	1,040	(NA)	(NA)	(NA)	(NA)

<sup>12</sup>Represents New Jersey, Pennsylvania, Illinois, Wisconsin, Iowa, Missouri, Kansas, Virginia, Tennessee, Arkansas, and New Mexico. Except for value of shipments, excludes lead mining in Illinois, Virginia, Tennessee, and Arkansas (products valued at \$16 thousand) and zinc mining in Iowa, Missouri, Arkansas, and New Mexico (products valued at \$2,033 thousand).

<sup>13</sup>Represents mines east of the 100th meridian only.

<sup>14</sup>Represents the sum of the figures shown for the separate industries and probably includes some duplication due to the same company operating in more than one industry.

<sup>15</sup>Represents short tons of crude ore mined, except for the Placer Gold Industry for which it represents fine ounces of placer gold shipped. For groups of industries, excludes figures for placer gold. For the Copper Ores Industry in 1963 includes ore valued chiefly for copper produced in other industries. For 1919, includes the U.S. Bureau of Mines figure for production of copper ores and siliceous ores in Alaska.

<sup>16</sup>Excludes data for lode gold in Alaska.

<sup>17</sup>The cost of minerals received for treatment is included with the cost of supplies, purchases for resale, and purchased fuels and electric energy.

<sup>18</sup>Includes small quantities of gold recovered from placer gravels by establishments classified in other industries. See also footnote 1.

<sup>19</sup>Only combined figures are available for all of the 3,252 nonproducing gold mines reported for 1902. Data for all of these mines are included with the figures for producing lode gold and silver ores operations.

<sup>20</sup>Includes an estimate of \$10,000 thousand for value added in mining at placer gold establishments.

<sup>21</sup>Figures for number of employees include, but figures for wages and salaries exclude, data for 732 employees reported as "staff." Many of these persons may have been proprietors.

<sup>22</sup>Figures for 1870 are probably understated and those for 1860 are probably overstated. For 1870, no estimates were made for missing reports. For 1860, estimates were made for about 5,000 apparently missing reports and the figures also include data for refineries and assay establishments.

<sup>23</sup>Represents fine ounces, including for Alaska the U.S. Bureau of Mines figure for placer gold production.

<sup>24</sup>Represents ore sold or treated, including milling ores, but excluding the production of "certain small operators, from whom no individual reports were received."

<sup>25</sup>Excludes data for placer gold establishments.

TABLE 2. General Statistics by Geographic Areas and Type of Operation: 1963 and 1958

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of sup- plies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of primary products <sup>2</sup>	Capital expendi- tures	All em- ployees	Value added in mining
	Total (number)	With 20 employ- ees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)							
1021.—COPPER ORES INDUSTRY														
TOTAL.....	160	41	<sup>3</sup> 26,486	<sup>3</sup> 187,307	21,372	45,319	142,395	417,089	340,162	670,173	<sup>4</sup> 145,312	87,078	27,648	<sup>5</sup> 266,485
<u>Geographic Area</u>														
Montana.....	13	3	3,571	23,420	2,915	5,900	17,389	23,482	81,212	71,040	8,150	33,654	3,685	20,413
Arizona.....	65	19	12,507	92,316	10,451	23,893	76,140	257,765	123,186	345,066	80,766	35,885	13,072	165,569
Other States.....	82	19	10,408	71,571	8,006	15,526	48,866	135,842	135,764	254,067	<sup>4</sup> 56,396	17,539	10,891	<sup>5</sup> 80,503
<u>Type of Operation</u>														
Producing establishments, total.....	90	41	24,308	168,236	21,183	44,974	141,370	417,023	338,390	670,173	145,312	85,240	<sup>5</sup> 27,304	<sup>5</sup> 267,560
Mines only.....	49	10	8,710	59,513	7,974	15,918	50,898	124,063	43,830	157,456	<sup>4</sup> 57,758	10,437	(NA)	(NA)
Mines with treatment plants:														
Open-pits.....	18	15	7,399	52,414	6,369	14,720	44,140	184,625	91,314	247,273	67,788	28,666	(NA)	(NA)
Underground mines.....	15	8	5,103	36,774	4,222	9,361	30,719	55,158	28,084	75,061	19,766	8,181	6,255	47,381
Treatment plants only.....	8	8	3,096	19,535	2,618	4,975	15,613	53,177	175,162	190,383	-	37,956	(NA)	(NA)
Nonproducing establishments.....	70	-	211	1,121	189	345	1,025	66	1,772	-	-	1,838	<sup>5</sup> 338	( <sup>6</sup> )
1031.—LEAD AND ZINC ORES INDUSTRY														
TOTAL.....	205	46	<sup>3</sup> 9,422	<sup>3</sup> 49,337	7,822	14,781	37,935	84,373	63,488	135,965	14,154	11,896	<sup>5</sup> 11,227	<sup>5</sup> 73,679
Lead ores subindustry.....	125	13	<sup>3</sup> 4,320	<sup>3</sup> 21,892	3,401	5,948	15,333	34,046	22,805	50,743	4,563	6,108	<sup>5</sup> 6,883	<sup>5</sup> 48,023
Zinc ores subindustry.....	80	33	<sup>3</sup> 5,102	<sup>3</sup> 27,445	4,421	8,833	22,602	50,327	40,683	85,222	9,591	5,788	<sup>5</sup> 4,344	25,656
<u>Geographic Area</u>														
Northeast and North Central.....	28	13	3,085	14,916	2,401	3,945	9,991	28,147	19,594	44,404	5,484	3,337	4,026	23,565
Missouri <sup>7</sup> .....	5	3	1,651	6,748	1,306	1,815	4,632	13,026	4,755	15,927	3,347	1,854	2,852	17,725
South.....	36	11	1,544	7,774	1,258	2,612	6,004	13,896	11,369	22,547	3,976	2,718	1,624	8,029
East South Central (Tennessee) <sup>8</sup> .....	9	8	914	5,125	766	1,622	4,127	9,564	6,606	13,855	2,820	2,315	844	(NA)
West.....	141	22	4,793	26,647	4,163	8,224	21,940	42,330	32,525	69,014	4,638	5,841	<sup>5</sup> 5,577	<sup>5</sup> 42,085
Lead ores subindustry.....	113	10	2,525	13,986	2,070	4,084	10,661	20,941	17,953	34,717	1,208	4,177	<sup>5</sup> 3,844	<sup>5</sup> 29,979
Zinc ores subindustry.....	28	12	2,268	12,661	2,093	4,140	11,279	21,389	14,572	34,297	3,430	1,664	1,733	12,106
Montana.....	13	2	537	2,885	489	863	2,404	3,664	5,996	9,588	1,213	72	596	4,191
Idaho.....	29	4	1,726	9,870	1,466	2,954	7,939	14,195	5,215	18,486	984	924	1,946	11,701
Arizona.....	18	1	69	410	65	104	399	( <sup>6</sup> ) 578	340	41	210	416	4,077	
Utah.....	22	6	1,094	6,448	908	1,883	5,056	11,962	14,426	22,859	645	3,529	1,145	9,557
<u>Type of Operation</u>														
Producing establishments.....	147	44	8,948	46,117	7,691	14,548	37,331	84,618	62,401	135,965	14,154	11,054	<sup>5</sup> 10,395	<sup>5</sup> 74,907
Mines without treatment plants:														
Underground mines.....	84	12	1,614	8,093	1,421	2,882	6,802	12,818	6,774	17,297	3,190	2,295	2,108	17,128
Open stoping.....	77	7	645	2,966	575	1,192	2,590	5,054	3,216	7,269	2,580	1,001	624	5,205
Mines with treatment plants:														
Underground mines.....	40	23	6,264	32,186	5,385	9,984	26,079	62,589	26,220	80,431	9,728	8,378	7,729	52,928
Open stoping.....	30	15	3,621	17,348	3,003	5,173	13,161	34,879	16,946	46,855	7,778	4,970	4,655	29,067
Treatment plants only.....	9	7	642	3,486	498	997	2,544	6,092	28,209	33,961	-	340	369	4,094
Nonproducing establishments.....	58	2	178	742	131	233	604	( <sup>6</sup> )	1,087	-	-	842	<sup>5</sup> 420	( <sup>6</sup> )
Lead ores subindustry:														
Producing establishments.....	82	12	3,969	19,383	3,317	5,827	14,965	34,303	21,963	50,743	4,563	5,523	<sup>5</sup> 6,392	<sup>5</sup> 49,153
Underground mines with treatment plants.....	14	7	3,056	14,495	2,534	4,212	10,986	26,129	8,709	31,153	4,086	3,685	4,971	36,549
Open stoping.....	10	4	1,701	6,952	1,366	1,862	4,866	13,308	4,618	16,417	3,369	1,509	(NA)	(NA)
Nonproducing establishments.....	43	1	121	457	84	121	368	( <sup>6</sup> )	842	-	-	585	<sup>5</sup> 278	( <sup>6</sup> )
Zinc ores subindustry:														
Producing establishments.....	65	32	4,979	26,734	4,374	8,721	22,366	50,315	40,438	85,222	9,591	5,531	4,003	25,754
Underground mines with treatment plants.....	26	16	3,208	17,691	2,851	5,774	15,093	36,460	17,511	49,278	5,642	4,693	2,758	16,379
Open stoping.....	20	11	1,920	10,396	1,637	3,311	8,295	21,571	12,328	30,438	4,409	3,461	(NA)	(NA)

See footnotes at end of table.

TABLE 2. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of sup- plies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of primary products <sup>2</sup>	Capital expendi- tures	All em- ployees	Value added in mining
	Total (number)	With 20 employ- ees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)							
(number)	(number)	(number)	(number)	(number)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(number)	(1,000)		
1042.—LODE GOLD INDUSTRY														
TOTAL.....	201	5	2,397	13,861	2,091	4,544	11,422	21,312	8,179	26,632	2,514	2,859	<sup>2</sup> 2,586	<sup>2</sup> 22,659
Geographic Area														
North Central (South Dakota).....	3	1	1,765	10,113	1,556	3,409	8,592	16,402	4,485	20,351	1,914	536	<sup>2</sup> 1,850	<sup>2</sup> 15,803
South and West.....	198	4	632	3,748	535	1,135	2,830	4,918	3,694	6,289	600	2,323	(NA)	(NA)
Mountain:														
Nevada.....	26	1	180	1,073	171	385	1,007	1,151	1,868	2,094	379	925	93	(NA)
Pacific.....	93	3	331	2,297	256	537	1,468	3,463	1,460	4,023	205	900	<sup>2</sup> 321	<sup>2</sup> 4,721
Washington.....	16	2	151	1,062	134	289	919	3,145	832	3,743	175	234	103	(NA)
Type of Operation														
Producing establishments.....	70	4	2,180	13,007	1,902	4,175	10,660	20,952	6,851	26,632	2,514	1,171	<sup>2</sup> 2,330	<sup>2</sup> 22,589
Nonproducing establishments.....	131	1	217	854	189	369	762	360	1,328	-	-	1,688	<sup>2</sup> 256	<sup>2</sup> 70
1043.—PLACER GOLD INDUSTRY														
TOTAL.....	158	2	361	2,134	325	731	1,763	5,810	2,711	7,532	<sup>2</sup> 193.7	989	840	9,123
Geographic Area														
Pacific.....	123	2	344	2,092	308	693	1,721	5,760	2,493	7,493	<sup>2</sup> 193.7	760	(NA)	(NA)
Type of Operation														
Producing establishments.....	110	2	331	2,013	295	664	1,642	5,792	2,021	7,532	<sup>2</sup> 193.7	281	788	9,032
Nonproducing establishments.....	48	-	30	121	30	67	121	18	690	-	-	708	52	91
1044.—SILVER ORES INDUSTRY														
TOTAL.....	107	8	1,458	8,802	1,169	2,330	6,834	21,904	7,494	26,060	916	3,338	989	10,364
Geographic Area														
Mountain.....	94	8	1,406	8,519	1,150	2,307	6,783	21,707	7,337	25,978	913	3,066	(NA)	(NA)
Idaho.....	16	5	963	5,857	822	1,561	4,746	17,052	4,465	20,524	507	993	878	9,588
Type of Operation														
Producing establishments.....	57	6	1,314	8,160	1,072	2,126	6,353	21,587	6,542	26,060	916	2,069	928	10,403
Underground mines with treatment plants.....	9	6	1,252	7,420	1,042	2,076	6,212	20,777	6,142	25,227	812	1,692	(NA)	(NA)
Nonproducing establishments.....	50	2	144	642	97	204	481	317	952	-	-	1,269	61	( <sup>6</sup> )

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>General statistics for some States are not shown separately in this table in order to avoid disclosing figures for individual companies or because of the relatively small size of the statistics. Such States are shown below for 1963, with the number of establishments in each State (and in parentheses the number of employees or employment-size range):

SIC 1021, Copper Ores: New York (500-999, separately reported central offices only); Pennsylvania, 1 (0-4); Michigan, 7 (2,395); Missouri, 1 (10-19); Nebraska, 1 (0-4); North Carolina, 2 (5-9); Tennessee, 1 (0-4); Idaho, 4 (11); Colorado, 7 (31); New Mexico, 17 (1,450); Utah, 15 (4,017); Nevada, 11 (1,403); Washington, 2 (20-49); Oregon, 4 (13); California, 6 (71); and Alaska, 3 (21).

SIC 1031, Lead and Zinc Ores: Maine, 1 (0-4); Massachusetts (20-49, separately reported central offices only); New York, 2 (250-499); New Jersey, 1 (250-499); Pennsylvania, 1 (100-249); Illinois, 5 (340); Wisconsin, 8 (118); Virginia, 2 (250-499); Arkansas, 2 (10-19); Oklahoma, 22 (269); Texas, 1 (0-4); Colorado, 25 (907); New Mexico, 7 (181); Nevada, 10 (15); Washington, 11 (255); and California, 6 (9).

SIC 1042, Lode Gold: North Carolina, 1 (5-9); Texas, 1 (0-4); Montana, 23 (45); Idaho, 17 (24); Colorado, 20 (22); New Mexico, 4 (11); Arizona, 12 (10); Utah, 1 (0-4); Oregon, 5 (0-4); California, 65 (162); and Alaska, 7 (10-19).

SIC 1043, Placer Gold: Montana, 3 (0-4); Idaho, 4 (0-4); Wyoming, 1 (0-4); Colorado, 10 (6); Arizona, 8 (8); Utah, 1 (0-4); Nevada, 8 (0-4); Washington, 2 (0-4); Oregon, 7 (5-9); California, 47 (138); Alaska, 67 (200).

SIC 1044, Silver Ores: South Dakota, 1 (0-4); Montana, 16 (40); Colorado, 21 (80); New Mexico, 3 (8); Arizona, 11 (253); Utah, 6 (8); Nevada, 21 (54); Washington, 5 (21); Oregon, 2 (20-49); California, 3 (0-4); and Alaska, 2 (5-9).

<sup>2</sup>Represents short tons of crude ore mined, except for the Placer Gold Industry for which it represents fine ounces of placer gold shipped.

<sup>3</sup>Includes figures for separately reported central offices and related facilities which were distributed by geographic area but not by type of operation.

<sup>4</sup>Includes ore valued chiefly for copper produced in other industries, amounting to less than 0.01 percent of the United States total.

<sup>5</sup>Excludes figures for Alaska.

<sup>6</sup>Not shown since the cost of supplies, minerals received for treatment, fuels, purchased electric energy, contract work, and purchased machinery installed exceeded value of shipments and receipts plus capital expenditures.

<sup>7</sup>All in the Lead Ores Subindustry.

<sup>8</sup>All in the Zinc Ores Subindustry.

<sup>9</sup>Excludes figures for one establishment each in North Dakota and in Nebraska.

**TABLE 3. Detailed Statistics for Industries, by Geographic Area and Selected Types of Operation: 1963**

Item	1021.-Copper ores industry								1031.-Lead and zinc ores industry					
	United States, total	Montana	Arizona	Other States	Producing establishments				United States			Northeast and North Central		
					Mines without treatment plants	Mines with treatment plants		Treatment plants only	All operations, total	Lead ores sub-industry	Zinc ores sub-industry	Region	Missouri <sup>1</sup>	
						Open-pit	Under-ground							
Establishments, total.....number..	160	13	65	82	49	18	15	8	205	125	80	28	5	
With 0 to 19 employees.....do....	119	10	46	63	39	3	7	-	159	112	47	15	2	
With 20 to 99 employees.....do....	9	1	2	6	2	4	1	2	22	5	17	6	-	
With 100 employees and over.....do....	32	2	17	13	8	11	7	6	24	8	16	7	3	
Including mines.....do....	152	11	64	77	49	18	15	-	196	124	72	24	5	
Including treatment plants.....do....	49	4	20	25	-	18	15	8	54	16	38	12	4	
Crude ore mined.....1,000 short tons..	2145,312	8,150	80,766	256,396	257,758	67,788	19,766	(X)	14,154	4,563	9,591	5,484	3,347	
Value of shipments and receipts....\$1,000..	670,173	71,040	345,066	254,067	157,456	247,273	75,061	190,383	135,965	50,743	85,222	44,404	15,927	
Minerals transferred to other establishments for treatment and resales.....do....	125,934	30,153	345,066	254,067	125,934	-	-	-	16,180	5,993	10,187	44,404	15,927	
Net shipments and receipts, total...do....	544,239	40,887			31,522	247,273	75,061	190,383	119,785	44,750	75,035			
Primary products.....do....	522,122	40,886	316,516	164,720	31,522	245,353	75,061	190,383	109,684	44,750	75,035		(D)	
Other products and services.....do....	22,117	1	(D)	(D)		1,920			10,101				(D)	
Value added in mining.....do....	417,089	23,482	257,765	135,842	124,063	184,625	55,158	53,177	84,373	34,046	50,327	28,147	13,026	
Persons in industry, total.....number..	26,592	3,590	12,549	10,453	8,754	7,401	5,117	3,096	9,510	4,381	5,129	3,086	1,651	
Production, development, and exploration workers, average for year....do....	21,372	2,915	10,451	8,006	7,974	6,369	4,222	2,618	7,822	3,401	4,421	2,401	1,306	
March.....do....	21,570	2,924	10,501	8,145	8,153	6,335	4,301	2,644	7,927	3,554	4,373	2,464	1,400	
May.....do....	21,298	2,828	10,488	7,982	7,925	6,349	4,270	2,559	7,752	3,350	4,402	2,345	1,275	
August.....do....	21,185	2,812	10,454	7,919	7,725	6,464	4,137	2,605	7,747	3,383	4,364	2,381	1,274	
November.....do....	21,436	3,096	10,357	7,983	8,083	6,327	4,183	2,660	7,885	3,347	4,538	2,409	1,273	
All other employees.....do....	45,111	656	2,055	2,400	736	1,030	881	478	41,600	4,919	4,681	684	345	
Proprietors and firm members.....do....	109	19	43	47	44	2	14	-	88	61	27	1	-	
Performing manual labor.....do....	84	10	42	32	40	2	5	-	79	59	20	1	-	
Man-hours worked by production, development, and exploration workers, total.....1,000..	45,319	5,900	23,893	15,526	15,918	14,720	9,361	4,975	14,781	5,948	8,833	3,945	1,815	
At mines, total.....do....	34,173	5,116	18,097	10,960	15,908	10,234	7,700	-	12,631	5,547	7,084	3,196	1,657	
Underground.....do....	12,148	2,997	5,975	3,176	6,308	-	5,739	-	10,296	4,489	5,807	2,524	1,294	
Open-pit.....do....	12,694	1,089	6,046	5,559	6,729	5,920	-	-	47	15	32	-	-	
Surface (including mine shops and yards).....do....	9,331	1,030	6,076	2,225	2,871	4,314	1,961	-	2,288	1,043	1,245	672	363	
At treatment plants.....do....	11,146	784	5,796	4,566	10	4,486	1,661	4,975	2,150	401	1,749	749	158	
Man-hours spent on development and exploration work.....do....	1,315	22	974	319	304	258	629	-	1,029	354	675	257	120	
Principal expenses designated below, total.....\$1,000..	481,875	76,122	206,829	198,924	98,671	136,126	63,129	163,217	108,553	42,801	65,752	33,546	11,246	
Wages of production, development, and exploration workers.....do....	142,395	17,389	76,140	48,866	50,898	44,140	30,719	15,613	37,935	15,333	22,602	9,991	4,632	
Salaries of all other employees.....do....	444,908	6,031	16,173	22,704	8,615	8,274	6,055	3,922	411,402	46,559	44,843	4,925	2,116	
Supplies and purchases for resale.....do....	108,493	12,383			27,681	57,236	20,576	13,652	22,848	15,886	33,075	14,470	1,953	
Minerals received for treatment.....do....	129,793	32,212	84,362	109,329				118,916	26,113					
Purchased fuels.....do....	7,961	497	3,980	3,484	1,302	3,485	1,228	1,937	933	259	674	348	92	
Purchased electric energy.....do....	17,788	1,965	10,566	5,257	2,820	7,997	3,347	3,533	5,734	2,233	3,501	2,334	1,095	
Contract work.....do....	30,537	5,645	15,608	9,284	7,355	14,994	1,204	5,644	3,588	2,531	1,057	1,478	1,358	
Purchased machinery installed.....do....	45,590	28,510	8,670	8,410	4,672	7,602	1,729	31,480	4,272	1,896	2,376	964	257	
Capital expenditures, total.....do....	87,078	33,654	35,885	17,539	10,437	28,666	8,181	37,956	11,896	6,108	5,788	3,337	1,854	
Development and exploration of mineral property.....do....	23,145	179	18,355	4,611	2,586	12,721	6,398	-	6,919	4,063	2,856	2,036	1,602	
Treatment plant construction and other construction.....do....	24,718	16,725	6,097	1,896	1,319	5,889	346	16,862	1,083	250	833	617	-	
New machinery and equipment.....do....	39,021	16,737	11,271	11,013	6,526	9,938	1,384	21,094	3,579	1,766	1,813	680	252	
Used plant and equipment.....do....	194	13	162	19	6	118	53	-	315	29	286	4	-	
Energy used.....million kwh. equivalent..	8,242	1,008	3,495	3,739	1,357	2,721	1,203	2,934	1,093	389	702	401	157	
Coal.....1,000 short tons..	146	-	(2)	146	22	1	85	37	10	2	8	2	-	
Distillate fuel oil.....1,000 barrels..	466	1	341	124	113	337	8	9	75	10	65	31	(2)	
Residual fuel oil.....do....	116	-	20	96	5	22	14	76	17	4	13	3	-	
Gas.....million cu. ft..	10,823	1,583	4,958	4,282	1,162	3,471	316	5,873	587	191	396	240	54	
Gasoline.....1,000 gallons..	2,502	40	1,591	871	870	1,235	255	100	508	198	310	156	97	
Other fuels and undistributed.....\$1,000..	494	-	278	216	43	312	100	-	110	66	35	44	17	
Electric energy purchased....million kwh..	2,571	518	1,225	828	586	908	380	684	622	259	363	236	121	
Electric energy generated and used....do....	813	-	395	418	18	228	286	281	15	-	15	-	-	
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	1,886	231	960	695	631	726	254	248	433	207	228	156	99	
Per production worker.....hp..	88	79	92	87	79	114	60	95	56	61	52	65	76	
Prime movers.....1,000 hp..	963	110	535	318	272	432	130	122	95	34	61	25	13	
Electric motors driven by purchased energy.....do....	923	121	425	377	359	294	124	126	338	173	167	131	86	
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	245	-	131	114	13	73	89	70	4	(2)	4	-	-	
See footnotes at end of table.														

See footnotes at end of table.

**TABLE 3. Detailed Statistics for Industries, by Geographic Area and Selected Types of Operation: 1963—Continued**

Item	1031.—Lead and zinc ores industry—Continued												
	South			West					Producing establishments				
	Region	East South Central <sup>6</sup>	Region, total	Lead ores sub-industry	Zinc ores sub-industry	Montana	Idaho	Utah	All operations	Underground mines			
										Without treatment plants		With treatment plants	
										All operations	Open stoping	All operations	Open stoping
Establishments, total.....number..	36	9	141	113	28	13	29	22	147	84	77	40	30
With 0 to 19 employees.....do....	25	1	119	103	16	11	25	16	103	72	70	17	15
With 20 to 99 employees.....do....	6	4	10	5	5	-	1	3	20	7	5	7	5
With 100 employees and over.....do....	5	4	12	5	7	2	3	3	24	5	2	16	10
Including mines.....do....	34	9	138	112	26	12	29	21	138	77	77	40	30
Including treatment plants.....do....	18	6	24	12	12	1	8	3	51	-	-	40	30
Crude ore mined.....1,000 short tons..	4,032	2,820	4,638	1,208	3,430	1,213	984	645	14,154	3,190	2,580	9,728	7,778
Value of shipments and receipts.....\$1,000..	22,547	13,855	69,014	34,717	34,297	9,588	18,486	22,859	135,965	17,297	7,269	80,431	46,855
Minerals transferred to other establishments for treatment and resales.....do....													
Net shipments and receipts, total.....do....	22,547	13,855	10,666	5,926	4,740	3,841	18,486	22,859	16,180	11,983	6,260	4,630	4,630
Primary products.....do....	18,429	(D)	58,348	28,791	29,557	5,747	(D)	16,568	119,785	5,314	1,009	75,801	42,225
Other products and services <sup>3</sup> .....do....	(b)	-	53,910	21,151	15,868	5,747	(b)	(D)	109,684	5,314	1,009	72,420	42,225
Value added in mining.....do....	13,896	9,564	42,330	20,941	21,389	3,664	14,195	11,962	84,618	12,818	5,054	62,589	34,879
Persons in industry, total.....number..	1,557	914	4,867	2,585	2,282	544	1,740	1,104	9,086	1,659	693	6,276	3,628
Production, development, and exploration workers, average for year.....do....	1,258	766	4,163	2,070	2,093	489	1,466	908	7,691	1,421	579	5,385	3,003
March.....do....	1,254	717	4,209	2,109	2,100	505	1,460	900	7,806	1,430	619	5,525	3,121
May.....do....	1,248	734	4,159	2,044	2,115	518	1,455	912	7,634	1,438	606	5,329	2,960
August.....do....	1,224	755	4,142	2,093	2,049	453	1,488	932	7,634	1,431	565	5,366	2,958
November.....do....	1,311	851	4,165	2,062	2,103	484	1,461	895	7,707	1,441	559	5,306	2,966
All other employees.....do....	286	148	630	455	175	46	260	186	1,323	193	69	879	618
Proprietors and firm members.....do....	13	-	74	60	14	9	14	10	72	45	45	12	7
Performing manual labor.....do....	6	-	72	58	14	9	13	10	63	41	41	7	3
Man-hours worked by production, development, and exploration workers, total.....1,000..	2,614	1,622	8,222	4,082	4,140	863	2,954	1,883	14,548	2,882	1,192	9,987	5,174
At mines, total.....do....	2,066	1,264	7,369	3,839	3,530	626	2,811	1,668	12,407	2,882	1,192	8,867	4,399
Underground.....do....	1,792	1,129	5,980	3,148	2,832	448	2,238	1,466	10,167	2,480	1,043	7,241	3,577
Open-pit.....do....	-	-	47	15	32	30	1	-	47	-	-	-	-
Surface (including mine shops and yards).....do....	286	135	1,342	676	666	148	572	202	2,193	402	149	1,626	822
At treatment plants.....do....	548	358	853	243	610	237	143	215	2,141	-	-	1,120	775
Man-hours spent on development and exploration work.....do....	207	160	565	234	331	-	275	156	981	154	86	823	349
Principal expenses designated below, total.....\$1,000..	17,909	10,859	57,098	30,352	26,746	8,867	14,871	19,693	104,352	13,327	5,731	55,811	32,134
Wages of production, development, and exploration workers.....do....	6,004	4,127	21,940	10,661	11,279	2,404	7,939	5,056	37,331	6,802	2,590	26,079	13,161
Salaries of all other employees.....do....	1,770	998	4,707	3,325	1,382	481	1,931	1,392	8,786	1,291	376	6,107	4,187
Supplies and purchases for resale.....do....	8,167	4,644	12,318	13,910	12,414	5,609	4,248	11,647	22,723	3,378	2,087	14,922	7,571
Minerals received for treatment.....do....	130	69	14,006	165	290	32	91	76	26,113	-	-	2,383	2,383
Purchased fuels.....do....	1,053	505	455	165	290	32	91	76	919	123	73	582	383
Purchased electric energy.....do....	785	516	2,347	1,134	1,213	332	645	690	5,664	785	401	3,871	2,674
Contract work.....do....	1,234	872	1,325	1,157	168	9	17	832	2,823	948	204	1,867	1,775
Purchased machinery installed.....do....	1,234	872	2,074	1,587	487	14	214	1,181	4,166	1,540	451	2,594	2,160
Capital expenditures, total.....do....	2,718	2,315	5,841	4,177	1,664	72	924	3,529	11,054	2,295	1,001	8,378	4,970
Development and exploration of mineral property.....do....	1,193	1,086	3,690	2,437	1,253	21	710	2,259	6,148	547	350	5,589	2,524
Treatment plant construction and other construction.....do....	185	174	281	235	46	14	41	95	1,066	228	226	719	668
New machinery and equipment.....do....	1,060	822	1,839	1,480	359	33	172	1,171	3,534	1,492	397	1,796	1,505
Used plant and equipment.....do....	280	233	31	25	6	4	1	4	306	28	28	274	273
Energy used.....million kw. equivalent..	188	107	504	231	273	67	142	136	1,044	113	50	712	454
Coal.....1,000 short tons..	1	1	7	2	5	-	2	3	10	2	(Z)	7	3
Distillate fuel oil.....1,000 barrels..	16	10	28	3	25	(2)	1	3	72	12	7	56	42
Residual fuel oil.....do....	-	-	13	4	9	-	3	1	17	1	(Z)	15	4
Gas.....million cu. ft..	82	7	266	138	128	96	55	115	401	4	(Z)	148	61
Gasoline.....1,000 gallons..	74	16	278	101	177	9	103	37	742	61	33	374	246
Other fuels and undistributed.....\$1,000..	9	-	67	45	22	1	5	3	183	22	11	57	57
Electric energy purchased.....million kw..	123	79	263	137	126	37	97	69	618	68	34	461	310
Electric energy generated and used.....do....	-	-	15	(Z)	15	-	(Z)	-	15	-	-	15	14
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	87	61	190	105	85	18	65	53	417	86	37	286	195
Per production worker.....hp..	69	80	46	51	41	37	44	58	54	61	64	53	65
Prime movers.....1,000 hp..	21	16	49	21	28	2	15	8	90	18	14	65	35
Electric motors driven by purchased energy.....do....	66	45	141	84	57	16	50	45	327	68	23	221	160
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	-	-	4	-	4	-	(Z)	-	4	-	-	4	4

See footnotes at end of table.

**TABLE 3. Detailed Statistics for Industries, by Geographic Area and Selected Types of Operation: 1963—Continued**

Item	1031.—Lead and zinc ores industry—Continued							104.—Gold and silver ores		
	Producing establishments—Continued							Total	1042.—Lode gold industry	
	Treatment plants only	Lead ores subindustry			Zinc ores subindustry				All operations, total	North Central (South Dakota)
		All operations	Underground mines with treatment plants		All operations	Underground mines with treatment plants				
			All operations	Open-stopping		All operations	Open-stopping			
Establishments, total.....number..	9	82	14	10	65	26	20	466	201	3
With 0 to 19 employees.....do....	2	70	7	6	33	10	9	451	196	2
With 20 to 99 employees.....do....	5	4	1	1	16	6	4	8	3	-
With 100 employees and over.....do....	2	8	6	3	16	10	7	7	2	-
Including mines.....do....	-	81	14	10	57	26	20	465	200	3
Including treatment plants.....do....	9	15	14	10	36	26	20	203	34	1
Crude ore mined.....1,000 short tons..	(X)	4,563	4,086	3,369	9,591	5,642	4,409	3,430	2,514	1,914
Value of shipments and receipts.....\$1,000..	33,961	50,743	31,153	16,417	85,222	49,278	30,438	60,224	26,632	20,351
Minerals transferred to other establishments for treatment and resales.....do....		5,993			10,187			-	-	-
Net shipments and receipts, total....do....	33,961	44,750	31,153	16,417	75,035	49,278	30,438	60,224	26,632	20,351
Primary products.....do....	(D)		25,600	15,540		34,067	24,092	56,794	26,325	20,185
Other products and services <sup>3</sup> .....do....	(D)	44,750	(D)	(D)	75,035	(D)	(D)	3,430	307	166
Value added in mining.....do....	6,092	34,303	26,129	13,308	50,315	36,460	21,571	49,026	21,312	16,402
Persons in industry, total.....number..	644	4,016	3,059	1,702	5,070	3,217	1,926	4,625	2,563	1,765
Production, development, and exploration workers, average for year.....do....	498	3,317	2,534	1,366	4,374	2,851	1,637	3,585	2,091	1,556
March.....do....	485	3,462	2,637	1,471	4,344	2,888	1,650	3,438	2,074	1,524
May.....do....	494	3,263	2,469	1,336	4,371	2,860	1,624	3,602	2,076	1,549
August.....do....	522	3,299	2,510	1,329	4,335	2,856	1,629	3,612	2,053	1,588
November.....do....	489	3,271	2,515	1,326	4,436	2,791	1,640	3,621	2,116	1,562
All other employees.....do....	144	652	522	335	671	357	283	631	306	209
Proprietors and firm members.....do....	2	47	3	1	25	9	6	409	166	-
Performing manual labor.....do....	2	45	3	1	18	4	2	373	131	-
Man-hours worked by production, development, and exploration workers, total.....1,000..	997	5,827	4,212	1,862	8,721	5,775	3,312	7,605	4,544	3,409
At mines, total.....do....	-	5,430	3,952	1,696	6,977	4,915	2,703	6,894	4,107	3,174
Underground.....do....	-	4,427	3,155	1,325	5,740	4,086	2,252	4,369	2,604	2,028
Open-pit.....do....	-	15	-	-	32	-	-	435	106	-
Surface (including mine shops and yards).....do....	-	988	797	371	1,205	829	451	2,090	1,397	1,146
At treatment plants.....do....	997	397	260	166	1,744	860	609	711	437	235
Man-hours spent on development and exploration work.....do....	-	354	298	121	627	525	228	1,026	553	263
Principal expenses designated below, total.....\$1,000..	31,678	39,497	22,675	11,227	64,855	33,137	20,907	41,156	21,556	14,598
Wages of production, development, and exploration workers.....do....	2,544	14,965	10,986	4,866	22,366	15,093	8,295	20,019	11,422	8,592
Salaries of all other employees.....do....	942	4,418	3,509	2,086	4,368	2,598	2,101	4,778	2,439	1,521
Supplies and purchases for resale.....do....	3,490		5,272	2,024		9,651	5,547		5,366	3,796
Minerals received for treatment.....do....	23,730	15,818	-	-	33,011	2,383	2,383	11,325	-	-
Purchased fuels.....do....	186	251	172	109	668	410	274	1,219	469	146
Purchased electric energy.....do....	785	2,213	1,703	1,115	3,451	2,168	1,559	2,017	935	543
Contract work.....do....	1	1,832	1,033	1,027	991	834	748	1,798	925	-
Purchased machinery installed.....do....	17	1,849	529	343	2,317	2,065	1,817	2,025	484	-
Capital expenditures, total.....do....	340	5,523	3,685	1,509	5,531	4,693	3,461	7,186	2,859	536
Development and exploration of mineral property.....do....	-	3,504	3,173	1,199	2,644	2,416	1,325	4,513	1,863	161
Treatment plant construction and other construction.....do....	108	240	87	39	826	632	629	656	207	-
New machinery and equipment.....do....	231	1,753	424	270	1,781	1,372	1,235	1,524	626	375
Used plant and equipment.....do....	-	26	1	1	280	273	272	493	163	-
Energy used.....million kwh. equivalent..	225	383	279	167	661	433	287	901	324	194
Coal.....1,000 short tons..	1	2	(Z)	-	8	7	3	64	14	14
Distillate fuel oil.....1,000 barrels..	3	10	8	7	62	48	35	37	13	4
Residual fuel oil.....do....	(Z)	4	3	-	13	12	4	43	38	-
Gas.....million cu. ft.....	409	191	109	54	210	39	7	80	64	59
Gasoline.....1,000 gallons.....	60	435	173	97	307	201	149	375	171	80
Other fuels and undistributed <sup>3</sup> .....\$1,000..	17	48	46	46	135	11	11	128	98	-
Electric energy purchased.....million kwh..	80	257	208	123	361	253	187	198	76	59
Electric energy generated and used.....do....	-	(Z)	-	-	15	15	14	33	28	28
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	30	199	145	93	218	141	102	240	83	53
Per production worker.....hp.....	60	60	57	68	50	49	62	67	40	34
Prime movers.....1,000 hp.....	3	33	26	6	57	39	29	106	31	17
Electric motors driven by purchased energy.....do....	27	166	119	87	161	102	73	134	52	36
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	-	(Z)	-	-	4	4	4	23	17	17

See footnotes at end of table.

**TABLE 3. Detailed Statistics for Industries, by Geographic Area and Selected Types of Operation: 1963—Continued**

Item	104.—Gold and silver ores—Continued									
	1042.—Lode gold industry—Continued		1043.—Placer gold industry			1044.—Silver ores industry				
	South and West	Producing establishments	All operations	Pacific	Producing establishments	All operations	Mountain		Producing establishments	
							All operations	Idaho	All operations	Underground mines with treatment plants
Establishments, total.....number..	198	70	158	123	110	107	94	16	57	9
With 0 to 19 employees.....do....	194	66	156	121	108	99	86	11	51	3
With 20 to 99 employees.....do....	3	2	1	1	1	4	4	2	2	2
With 100 employees and over.....do....	1	2	1	1	1	4	4	3	4	4
Including mines.....do....	197	70	158	123	110	107	94	16	57	9
Including treatment plants.....do....	33	30	158	123	110	11	10	5	11	9
Crude ore mined.....1,000 short tons..	600	2,514	(X)	(X)	(X)	916	913	507	916	812
Value of shipments and receipts.....\$1,000..	6,281	26,632	7,532	7,493	7,532	26,060	25,978	20,524	26,060	25,227
Minerals transferred to other establishments for treatment and resales.....do....	-	-	-	-	-	-	-	-	-	-
Net shipments and receipts, total.....do....	6,281	26,632	7,532	7,493	7,532	26,060	25,978	20,524	26,060	25,227
Primary products.....do....	6,140	26,325	6,791	6,752	6,791	23,678	23,597	20,524	23,679	25,227
Other products and services <sup>3</sup> .....do....	141	307	741	741	741	2,382	2,381		2,381	
Value added in mining.....do....	4,910	20,952	5,810	5,760	5,792	21,904	21,707	17,052	21,587	20,777
Persons in industry, total.....number..	798	2,218	526	464	457	1,536	1,477	965	1,361	1,252
Production, development, and exploration workers, average for year.....do....	535	1,902	325	308	324	1,169	1,150	822	1,072	1,042
March.....do....	550	1,870	277	260	250	1,087	1,077	838	1,012	995
May.....do....	527	1,886	351	334	324	1,175	1,153	834	1,060	1,027
August.....do....	465	1,915	359	342	332	1,200	1,173	817	1,097	1,055
November.....do....	554	1,903	300	283	273	1,205	1,188	793	1,116	1,087
All other employees.....do....	97	278	36	36	34	289	256	141	242	210
Proprietors and firm members.....do....	166	38	165	120	126	78	71	2	47	-
Performing manual labor.....do....	131	32	164	119	125	78	71	2	47	-
Man-hours worked by production, development, and exploration workers, total.....1,000..	1,135	4,175	731	693	664	2,330	2,307	1,561	2,126	2,076
At mines, total.....do....	933	3,747	679	645	619	2,108	2,085	1,430	1,904	1,854
Underground.....do....	576	2,358	17	17	17	1,748	1,729	1,186	1,558	1,518
Open-pit.....do....	106	104	326	293	269	3	3	3	3	-
Surface (including mine shops and yards).....do....	251	1,285	336	335	333	357	353	241	343	336
At treatment plants.....do....	202	428	52	48	45	222	222	131	222	222
Man-hours spent on development and exploration work.....do....	290	358	20	16	12	453	432	244	333	299
Principal expenses designated below, total.....\$1,000..	6,949	19,572	4,473	4,376	3,948	15,127	14,769	10,073	13,816	12,807
Wages of production, development, and exploration workers.....do....	2,830	10,660	1,763	1,721	1,642	6,834	6,783	4,746	6,353	6,212
Salaries of all other employees.....do....	909	2,347	371	371	371	1,968	1,736	1,111	1,807	1,208
Supplies and purchases for resale.....do....	1,570	5,104	1,000	972	915	4,959	4,915	3,557	4,608	4,507
Minerals received for treatment.....do....	-	-	(X)	(X)	(X)					
Purchased fuels.....do....	223	399	576	575	574	174	167	106	140	132
Purchased electric energy.....do....	392	899	423	412	389	659	657	411	617	611
Contract work.....do....	925	163	340	325	57	533	511	142	291	137
Purchased machinery installed.....do....	484	286	372	209	86	1,169	1,087	249	886	755
Capital expenditures, total.....do....	2,323	1,171	989	760	281	3,338	3,066	993	2,069	1,692
Development and exploration of mineral property.....do....	1,702	446	383	337	15	2,267	2,114	885	1,397	1,125
Treatment plant construction and other construction.....do....	207	121	265	222	149	184	140	25	44	6
New machinery and equipment.....do....	251	559	280	180	117	618	564	77	423	374
Used plant and equipment.....do....	163	43	61	21	-	269	248	6	205	187
Energy used.....million kwh. equivalent..	130	305	439	437	436	137	133	99	126	123
Coal.....do....1,000 short tons..	-	14	48	48	48	2	2	2	2	2
Distillate fuel oil.....do....1,000 barrels..	9	13	13	13	13	11	10	6	10	9
Residual fuel oil.....do....	38	38	1	1	1	4	4	4	4	4
Gas.....do....million cu. ft..	5	64	-	-	-	16	16	-	16	16
Gasoline.....do....1,000 gallons..	91	154	72	72	72	132	122	61	112	95
Other fuels and undistributed <sup>2</sup> .....\$1,000..	98	31	11	10	9	19	18	8	-	-
Electric energy purchased.....million kwh..	17	73	41	40	39	81	81	58	78	78
Electric energy generated and used.....do....	(Z)	28	2	2	-	3	3	1	3	3
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	30	74	100	96	94	57	55	31	46	43
Per production worker.....hp..	56	39	308	312	290	49	48	38	43	41
Prime movers.....do....1,000 hp..	14	27	51	50	47	24	22	7	16	13
Electric motors driven by purchased energy.....do....	16	47	49	46	45	33	33	24	31	30
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	(Z)	17	5	5	5	1	1	(Z)	1	1

Footnotes on next page.



**TABLE 3. Detailed Statistics for Industries, by Geographic Area and Selected Types of Operation: 1963—Continued**

Footnotes for Table 3.—10C

- Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.
- (Z) Less than one-half of the unit of measure specified.
- <sup>1</sup>All in the Lead Ores Subindustry.
- <sup>2</sup>Includes ore valued chiefly for copper produced in other industries, amounting to less than 0.01 percent of the United States total.
- <sup>3</sup>In addition, receipts of \$935 thousand for custom or toll work for others on ores or residues were reported, of which about one-half was in the Lead and Zinc Ores Industries and about one-half in the Lode Gold Industry.
- <sup>4</sup>Includes figures for separately reported central and related facilities which were distributed by geographic area but not by type of operation.
- <sup>5</sup>Undistributed fuels costs for the Copper Ores Industry were \$34 thousand; for the Lead and Zinc Ores Industry, \$52 thousand; and for the Gold and Silver Ores Industries, \$125 thousand.
- <sup>6</sup>All in the Zinc Ores Subindustry.

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963

Industry or subindustry and item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1021.—COPPER ORES INDUSTRY											
Establishments.....number..	160	92	17	10	6	3	5	11	8	7	1
All employees:											
Total.....do.....	126,486	97	108	132	170	198	751	3,933	5,301	13,829	(D)
Payroll.....\$1,000..	1187,307	400	558	601	780	860	4,259	25,392	35,475	101,032	(D)
Production, development, and exploration workers:											
Total.....number..	21,372	85	91	130	127	162	709	3,418	4,279	12,371	(D)
Man-hours.....1,000..	45,319	161	182	207	273	327	1,470	7,135	9,284	26,280	(D)
Wages.....\$1,000..	142,395	359	473	589	574	722	3,958	21,205	28,756	85,759	(D)
Value added in mining.....do.....	417,089	664	73	499	1,550	1,242	12,346	79,942	98,732	222,041	(D)
Value of shipments and receipts.....do.....	670,173	849	276	590	9,046	2,137	23,753	175,311	139,560	318,651	(D)
Capital expenditures.....do.....	87,078	698	605	699	33,615	20	14,048	7,667	9,861	19,865	(D)
Producing establishments, by type of operation, total.....number..	90	39	6	4	6	3	5	11	8	7	1
Mines only:											
Open-pits.....do.....	22	16	2	-	-	-	-	-	3	1	-
Combination open-pit and underground mines.....do.....	2	-	1	-	-	-	-	-	-	-	1
Underground mines:											
Open-stopping.....do.....	21	15	1	2	-	1	-	2	-	-	-
Shrinkage stopping.....do.....	2	1	-	-	1	-	-	-	-	-	-
Square setting.....do.....	1	-	-	-	-	-	-	-	-	1	-
Sublevel caving, top slicing, and other.....do.....	1	-	-	1	-	-	-	-	-	-	-
Mines with treatment plants:											
Open-pits.....do.....	18	3	-	-	3	1	1	4	4	2	-
Underground mines:											
Open-stopping.....do.....	10	3	2	1	-	1	1	1	-	1	-
Shrinkage stopping.....do.....	3	1	-	-	-	-	2	-	-	-	-
Block caving.....do.....	1	-	-	-	-	-	-	-	-	1	-
Sublevel caving, top slicing, and other.....do.....	1	-	-	-	-	-	-	-	1	-	-
Treatment plants only.....do.....	8	-	-	-	2	-	1	4	-	1	-
1031.—LEAD AND ZINC ORES INDUSTRY											
Establishments.....number..	205	121	17	21	16	6	12	9	2	1	-
All employees:											
Total.....do.....	19,422	139	108	265	512	424	1,996	2,904	2,778	(D)	-
Payroll.....\$1,000..	149,337	465	406	1,135	2,372	2,461	10,776	16,428	12,816	(D)	-
Production, development, and exploration workers:											
Total.....number..	7,822	119	87	219	438	358	1,798	2,525	2,278	(D)	-
Man-hours.....1,000..	14,781	231	165	461	853	759	3,473	4,972	3,867	(D)	-
Wages.....\$1,000..	37,935	396	338	986	1,978	1,975	9,230	13,577	9,455	(D)	-
Value added in mining.....do.....	84,373	1,186	569	2,231	4,445	4,647	20,641	33,843	16,811	(D)	-
Value of shipments and receipts.....do.....	135,965	1,369	1,038	3,435	8,790	17,869	31,972	49,826	21,666	(D)	-
Capital expenditures.....do.....	11,896	855	142	759	2,106	645	4,054	1,862	1,473	(D)	-
Lead Ores Subindustry											
Establishments.....number..	125	96	8	8	4	1	5	1	1	1	-
All employees:											
Total.....do.....	14,320	102	43	94	134	992	(D)	2,725	(D)	(D)	-
Payroll.....\$1,000..	121,892	317	121	325	601	5,409	(D)	13,067	(D)	(D)	-
Production, development, and exploration workers:											
Total.....number..	3,401	87	26	66	125	868	(D)	2,229	(D)	(D)	-
Man-hours.....1,000..	5,948	149	50	123	160	1,623	(D)	3,843	(D)	(D)	-
Wages.....\$1,000..	15,333	267	72	244	558	4,485	(D)	9,707	(D)	(D)	-
Value added in mining.....do.....	34,046	999	89	468	250	12,723	(D)	19,517	(D)	(D)	-
Value of shipments and receipts.....do.....	50,743	1,072	136	402	571	24,340	(D)	24,222	(D)	(D)	-
Capital expenditures.....do.....	6,108	674	119	507	287	3,085	(D)	1,436	(D)	(D)	-
Producing establishments, by type of operation, total.....number..	82	60	6	4	3	1	5	1	1	1	-
Mines only:											
Open-pits.....do.....	11	11	-	-	-	-	-	-	-	-	-
Underground mines:											
Open-stopping.....do.....	50	43	4	3	-	-	-	-	-	-	-
Shrinkage stopping.....do.....	1	-	-	-	1	-	-	-	-	-	-
Square setting.....do.....	3	-	1	-	-	-	1	-	-	-	-
Cut-and-fill stopping.....do.....	2	1	-	-	-	-	-	1	-	-	-
Mines with treatment plants:											
Underground mines:											
Open-stopping.....do.....	10	4	1	1	1	-	2	-	-	1	-
Shrinkage stopping.....do.....	1	1	-	-	-	-	-	-	-	-	-
Square setting.....do.....	1	-	-	-	-	-	1	-	-	-	-
Cut-and-fill stopping.....do.....	1	-	-	-	-	-	1	-	-	-	-
Sublevel caving, top slicing, and other.....do.....	1	-	-	-	-	-	-	-	1	-	-
Treatment plants only.....do.....	1	-	-	-	-	1	-	-	-	-	-

See footnotes at end of table.

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963—Continued

Industry or subindustry and item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
Zinc Ores Subindustry											
Establishments.....number..	80	25	9	13	12	5	7	8	1	-	-
All employees:											
Total.....do....	15,102	37	65	171	378	1,428	(D)	2,957	(D)	-	-
Payroll.....\$1,000..	127,445	148	285	810	1,771	7,828	(D)	16,177	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	4,421	32	61	153	313	1,288	(D)	2,574	(D)	-	-
Man-hours.....1,000..	8,833	82	115	338	693	2,609	(D)	4,996	(D)	-	-
Wages.....\$1,000..	22,602	129	266	742	1,420	6,720	(D)	13,325	(D)	-	-
Value added in mining.....do....	50,327	187	480	1,763	4,195	12,565	(D)	31,137	(D)	-	-
Value of shipments and receipts.....do....	85,222	297	902	3,033	8,219	25,501	(D)	47,270	(D)	-	-
Capital expenditures.....do....	5,788	181	23	252	1,819	1,614	(D)	1,896	(D)	-	-
Producing establishments, by type of operation, total.....number..	65	13	8	12	11	5	7	8	1	-	-
Mines only:											
Combination open-pit and underground mines.....do....	1	-	-	-	-	-	-	1	-	-	-
Underground mines:											
Open-stopping.....do....	27	10	3	7	4	1	2	-	-	-	-
Cut-and-fill stopping.....do....	1	-	-	-	-	-	-	1	-	-	-
Mines with treatment plants:											
Open-pits.....do....	1	1	-	-	-	-	-	-	-	-	-
Combination open-pit and underground mines.....do....	1	-	-	-	1	-	-	-	-	-	-
Underground mines:											
Open-stopping.....do....	20	2	4	3	2	2	4	3	-	-	-
Shrinkage stopping.....do....	3	-	-	-	1	1	-	1	-	-	-
Cut-and-fill stopping.....do....	1	-	-	-	-	-	-	1	-	-	-
Block caving.....do....	1	-	1	-	-	-	-	-	-	-	-
Sublevel caving, top slicing, and other.....do....	1	-	-	-	-	-	-	-	1	-	-
Treatment plants only.....do....	8	-	-	2	3	1	1	1	-	-	-
1042.—LODE GOLD INDUSTRY											
Establishments.....number..	201	176	15	5	2	1	1	-	-	1	-
All employees:											
Total.....do....	2,397	158	96	130	(D)	2,013	(D)	-	-	(D)	-
Payroll.....\$1,000..	13,861	485	441	749	(D)	12,186	(D)	-	-	(D)	-
Production, development, and exploration workers:											
Total.....number..	2,091	146	77	117	(D)	1,751	(D)	-	-	(D)	-
Man-hours.....1,000..	4,544	294	156	232	(D)	3,860	(D)	-	-	(D)	-
Wages.....\$1,000..	11,422	466	362	679	(D)	9,915	(D)	-	-	(D)	-
Value added in mining.....do....	21,312	306	383	857	(D)	19,766	(D)	-	-	(D)	-
Value of shipments and receipts.....do....	26,632	273	238	988	(D)	25,133	(D)	-	-	(D)	-
Capital expenditures.....do....	2,859	1,392	394	335	(D)	738	(D)	-	-	(D)	-
Producing establishments, by type of operation, total.....number..	70	57	6	3	1	1	1	-	-	1	-
Mines only:											
Open-pit.....do....	5	2	1	1	-	-	1	-	-	-	-
Combination open-pit and underground mines.....do....	2	2	-	-	-	-	-	-	-	-	-
Underground mines:											
Open-stopping.....do....	33	31	2	-	-	-	-	-	-	-	-
Sublevel caving, top slicing, and other.....do....	1	1	-	-	-	-	-	-	-	-	-
Mines with treatment plants:											
Open-pits.....do....	8	7	1	-	-	-	-	-	-	-	-
Combination open-pit and underground mines.....do....	3	1	2	-	-	-	-	-	-	-	-
Underground mines:											
Open-stopping.....do....	12	10	-	1	1	-	-	-	-	-	-
Shrinkage stopping.....do....	2	1	-	1	-	-	-	-	-	-	-
Cut-and-fill stopping.....do....	1	-	-	-	-	1	-	-	-	-	-
Sublevel caving, top slicing, and other.....do....	2	1	-	-	-	-	-	-	-	1	-
Treatment plants only.....do....	1	1	-	-	-	-	-	-	-	-	-
1043.—PLACER GOLD INDUSTRY											
Establishments.....number..	158	147	6	3	-	1	1	-	-	-	-
All employees:											
Total.....do....	361	85	35	241	-	(D)	(D)	-	-	-	-
Payroll.....\$1,000..	2,134	304	200	1,630	-	(D)	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	325	82	31	212	-	(D)	(D)	-	-	-	-
Man-hours.....1,000..	731	182	73	476	-	(D)	(D)	-	-	-	-
Wages.....\$1,000..	1,763	263	187	1,313	-	(D)	(D)	-	-	-	-
Value added in mining.....do....	5,810	623	431	4,756	-	(D)	(D)	-	-	-	-
Value of shipments and receipts.....do....	7,532	851	457	6,224	-	(D)	(D)	-	-	-	-
Capital expenditures.....do....	989	803	67	119	-	(D)	(D)	-	-	-	-
Producing establishments.....number..	108	97	6	3	-	1	1	-	-	-	-

See footnotes at end of table.

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963—Continued

Industry or subindustry and item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1044.—SILVER ORES INDUSTRY											
Establishments.....number..	107	87	6	6	2	2	3	1	-	-	-
All employees:											
Total.....do.....	1,458	76	37	91	144	(D)	1,110	(D)	-	-	-
Payroll.....\$1,000..	8,802	267	138	408	855	(D)	7,134	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,169	32	23	64	130	(D)	920	(D)	-	-	-
Man-hours.....1,000..	2,330	69	46	133	268	(D)	1,814	(D)	-	-	-
Wages.....\$1,000..	6,834	130	65	320	774	(D)	5,545	(D)	-	-	-
Value added in mining.....do....	21,904	432	48	740	1,458	(D)	19,226	(D)	-	-	-
Value of shipments and receipts.....do....	26,060	542	-	579	-	24,939	(D)	(D)	-	-	-
Capital expenditures.....do....	3,338	666	259	429	593	(D)	1,391	(D)	-	-	-
Producing establishments, by type of operation, total.....number..	57	46	-	5	-	2	3	1	-	-	-
Mines only:											
Open-pits.....do....	19	19	-	-	-	-	-	-	-	-	-
Combination open-pit and underground mines.....do....	1	1	-	-	-	-	-	-	-	-	-
Underground mines:											
Open-stopping.....do....	20	19	-	1	-	-	-	-	-	-	-
Square setting.....do....	2	2	-	-	-	-	-	-	-	-	-
Cut-and-fill stopping.....do....	1	1	-	-	-	-	-	-	-	-	-
Sublevel caving, top slicing, and other.....do....	3	2	-	1	-	-	-	-	-	-	-
Mines with treatment plants:											
Open-pits.....do....	2	2	-	-	-	-	-	-	-	-	-
Underground mines:											
Open-stopping.....do....	1	-	-	1	-	-	-	-	-	-	-
Shrinkage stopping.....do....	4	-	-	1	-	2	1	-	-	-	-
Cut-and-fill stopping.....do....	3	-	-	1	-	-	2	-	-	-	-
Sublevel caving, top slicing, and other.....do....	1	-	-	-	-	-	-	1	-	-	-

Standard Notes: -Represents zero. (D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left. (NA) Not available. (X) Not applicable.

<sup>1</sup>Includes figures for separately reported central offices and related facilities. These were not distributed by size of establishment.

TABLE 5A. Industry-Product Analysis—Summary of Industry Shipments and Receipts and Net Shipments of Primary Products: 1963 and 1958

(In thousands of dollars)

Ind. code	Industry and year	Value of shipments and receipts of establishments classified in the industry					Value of net shipments of primary products of the industry shipped by establishments in all industries		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total (produced in all industries)	Produced in this industry	Produced in other industries
1021	Copper ores.....1963..	670,173	648,056	(D)	(D)	-	532,233	522,104	10,129
	.....1958 <sup>1</sup> .	457,644	440,410	17,054	130	50	369,419	357,244	12,175
1031	Lead and zinc ores.....1963..	135,965	125,661	9,872	229	203	110,720	109,684	1,036
	.....1958 <sup>1</sup> .	120,561	116,420	4,031	110	-	102,676	99,702	2,974
	Lead ores subindustry.....1963..	50,743	42,230	8,370	(D)	(D)	45,981	(D)	(D)
	.....1958 <sup>1</sup> .	75,603	61,553	13,940	110	-	59,941	54,094	5,847
	Zinc ores subindustry.....1963..	85,222	67,241	17,692	(D)	(D)	64,739	(D)	(D)
	.....1958 <sup>1</sup> .	44,958	37,790	7,168	-	-	42,735	28,531	14,204
1042	Lode gold.....1963..	26,632	26,325	307	-	-	26,970	26,325	645
	.....1958 <sup>1</sup> .	29,506	29,436	70	-	-	29,072	28,164	908
1043	Placer gold.....1963..	7,532	6,791	(D)	(D)	-	6,791	6,791	-
	.....1958 <sup>1</sup> .	12,628	(D)	(D)	-	-	12,580	(NA)	(NA)
1044	Silver ores.....1963..	26,060	23,678	2,382	-	-	25,964	23,678	2,286
	.....1958	12,557	12,313	244	-	-	13,093	12,177	916

- Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

TABLE 5B. **Ores Mined and Gross Metal Content of Metal Bearing Materials Shipped: 1963**

Product	All industries, total	Copper, lead, zinc, gold, and silver ores industries and subindustries							All other industries
		Total	Copper ores	Lead ores	Zinc ores	Lode gold	Placer gold	Silver ores	
Copper, lead, zinc, gold, and silver ores mined.....1,000 short tons..	(NA)	162,896	145,312	4,563	9,591	2,514	(X)	916	(NA)
Gross copper content, total.....1,000 pounds..	2,441,016	2,401,967	2,373,770	8,414	12,414	7	-	7,362	39,049
Crude ores shipped to smelters and leaching plants.....do....	92,174	92,007	90,526	8,414	12,414	7	-	7,362	167
Concentrates, total.....do....	2,097,824	2,058,942	2,032,226						
Copper concentrates.....do....	2,079,647	2,040,765	2,032,226	3,752	4,776	7	-	4	38,882
Lead, zinc, gold, and silver concentrates.....do....	18,177	18,177	-	14,662	17,638	-	-	17,358	-
Copper precipitates.....do....	251,018	251,018	251,018	-	-	-	-	-	-
Gross lead content, total.....do....	522,146	516,951	-	359,701	103,718	6	-	53,526	5,195
Crude ores shipped to smelters.....do....	21,023	516,951	-	20,555	-	6	-	53,526	5,195
Concentrates, total.....do....	501,123			-	339,146	-			
Lead concentrates.....do....	430,069	425,037	-	334,349	90,668	-	-	20	5,032
Copper, zinc, gold, and silver concentrates.....do....	71,054	191,914	-	4,797	13,050	-	-	153,506	1163
Gross zinc content, total.....do....	1,179,680	1,137,452	13,537	154,689	932,970	6	-	36,250	42,228
Crude ores shipped to smelters.....do....	91,987	1,137,452	13,537	14,738	932,970	6	-	-	42,228
Concentrates, total.....do....	1,087,693			139,951					
Zinc concentrates.....do....	1,052,215	1,010,153	13,366	116,954	847,120	-	-	36,250	42,062
Copper, lead, gold, and silver concentrates.....do....	35,478	127,299	1171	22,997	185,850	-	-	3,537	1166
Gross gold content, total.....1,000 fine ounces..	1,437.0	1,436.8	417.6	31.7	32.8	739.3	193.7	21.7	0.2
From lode deposits, total.....do....	1,243.3	1,243.1	417.6	31.7	32.8	739.3	-	21.7	0.2
Crude ores shipped to smelters.....do....	29.2	29.2	17.5	31.7	25.8	5.8	-	1.0	(Z)
Concentrates, total.....do....	561.2	561.0	400.1						
Gold concentrates.....do....	95.7	95.7	-	8.1	-	87.6	-	20.7	0.2
Copper, lead, zinc, and silver concentrates.....do....	465.5	465.3	400.1	123.6	125.8	-	-	20.7	0.2
Mill bullion and precipitates.....do....	652.9	652.9	-	(Z)	7.0	645.9	-	-	-
From placer gravels.....do....	193.7	193.7	-	-	-	-	193.7	-	-
Gross silver content, total.....do....	34,583	34,489	9,435	5,891	3,773	480	17	14,893	94
From lode deposits, total.....do....	34,566	34,472	9,435	5,891	3,773	480	-	14,893	94
Crude ores shipped to smelters.....do....	2,043	34,282	392	5,891	3,771	1294	-	703	94
Concentrates, total.....do....	32,333								
Silver concentrates.....do....	14,974	14,974	9,043	11,001	1761	-	-	14,188	-
Copper, lead, zinc, and gold concentrates.....do....	17,359	119,308	9,043	4,890	3,010	1294	-	82	194
Mill bullion and precipitates.....do....	190	190	-	-	2	186	-	2	-
From placer gravels.....do....	17	17	-	-	-	-	17	(Z)	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
 (Z) Less than one-half of the unit of measure specified.  
<sup>1</sup>Includes metal content of crude ores shipped to smelters.

TABLE 6A. Primary Products of the Industries, by Geographic Areas: 1963 and 1958

Product and geographic area	Year <sup>1</sup>	Production	Shipments including interplant transfers or receipts for treatment		Gross quantity of metals contained <sup>2</sup>				
			Quantity (1,000 short tons)	Value (\$1,000)	Copper (1,000 pounds)	Lead (1,000 pounds)	Zinc (1,000 pounds)	Gold (1,000 fine ounces)	Silver (1,000 fine ounces)
		(1,000 short tons)	(1,000 short tons)						
COPPER ORES									
UNITED STATES, TOTAL									
Production and shipments:									
Crude ore mined in the copper ores industry, total.....	1963	145,312	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	111,957	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
From underground operations.....	1963	22,847	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	24,096	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
From open-pit operations.....	1963	122,465	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	87,861	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Ore and residues for shipment to—									
Smelters.....	1963	3,693	3,693	13,307	90,553	-	( <sup>3</sup> )	17.5	392
	1958	(X)	3,930	21,622	114,610	538	465	34.8	1,071
Mills.....	1963	57,158	57,158	125,934	998,678	-	-	359.7	5,956
	1958	(X)	46,878	83,166	849,820	-	-	460.4	5,580
Copper concentrates.....	1963	4,257	4,257	468,311	2,079,647	692	<sup>3</sup> 1,469	405.0	9,313
	1958	3,307	3,186	316,147	1,677,879	1,007	612	430.5	7,403
Copper precipitates.....	1963	168	169	50,615	251,018	(X)	(X)	(X)	(X)
	1958	(NA)	112	31,650	174,868	(X)	(X)	(X)	(X)
Minerals milled in the copper ores industry:									
Mined and milled at same establishment.....	1963	86,514	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	65,605	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Received from other establishments for milling.....	1963	(X)	57,197	129,793	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	(X)	47,257	89,011	(NA)	(NA)	(NA)	(NA)	(NA)
<u>Montana</u>									
Production and shipments:									
Crude ore mined in the copper ores industry, total.....	1963	8,150	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	10,107	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
From underground operations.....	1963	1,202	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	3,460	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
From open-pit operations.....	1963	6,948	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	6,647	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Ore and residues shipped to smelters and mills.....	1963	(X)	8,150	30,160	196,723	-	-	20.3	3,094
	1958	(X)	10,094	19,450	222,129	26	-	24.7	2,771
Copper concentrates and precipitates.....	1963	293	293	40,879	160,950	-	-	10.5	2,389
	1958	358	358	32,978	186,960	-	-	14.0	2,046
Minerals milled in the copper ores industry.....	1963	<sup>4</sup> 8,103	( <sup>4</sup> )	(D)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	<sup>4</sup> 10,070	( <sup>4</sup> )	(D)	(NA)	(NA)	(NA)	(NA)	(NA)
<u>Arizona</u>									
Production and shipments:									
Crude ore mined in the copper ores industry, total.....	1963	80,768	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	56,525	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
From underground operations.....	1963	14,330	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	14,352	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
From open-pit operations.....	1963	66,438	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	42,173	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Ore and residues shipped to smelters and mills.....	1963	(X)	11,052	35,194	259,266	-	(D)	(D)	(D)
	1958	(X)	3,925	23,410	135,468	6	(D)	38.6	904
Copper concentrates and precipitates.....	1963	2,521	2,521	303,586	1,231,533	-	(D)	(D)	<sup>5</sup> 4,116
	1958	<sup>6</sup> 1,731	1,657	185,277	871,384	-	-	77.8	2,743
Minerals milled in the copper ores industry.....	1963	<sup>4</sup> 80,176	( <sup>4</sup> )	(D)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	<sup>4</sup> 55,871	( <sup>4</sup> )	(D)	(NA)	(NA)	(NA)	(NA)	(NA)
<u>Other States</u>									
Production and shipments:									
Crude ore mined in the copper ores industry, total.....	1963	56,394	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	45,325	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
From underground operations.....	1963	7,315	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	6,284	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
From open-pit operations.....	1963	49,079	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	39,041	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Ore and residues shipped to smelters and mills.....	1963	(X)	41,650	73,887	633,242	-	-	(D)	(D)
	1958	(X)	36,789	61,928	606,833	506	(D)	431.9	2,976
Copper concentrates and precipitates.....	1963	1,611	1,612	174,461	938,182	692	(D)	(D)	<sup>5</sup> 3,200
	1958	<sup>6</sup> 1,225	1,283	129,542	794,403	1,007	612	338.7	2,614
Minerals milled in the copper ores industry.....	1963	<sup>4</sup> 55,432	( <sup>4</sup> )	(D)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	<sup>4</sup> 46,921	( <sup>4</sup> )	(D)	(NA)	(NA)	(NA)	(NA)	(NA)

See footnotes at end of table.

TABLE 6A. Primary Products of the Industries, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	Year <sup>1</sup>	Production (1,000 short tons)	Shipments including interplant transfers or receipts for treatment		Gross quantity of metals contained <sup>2</sup>				
			Quantity (1,000 short tons)	Value (\$1,000)	Copper (1,000 pounds)	Lead (1,000 pounds)	Zinc (1,000 pounds)	Gold (1,000 fine ounces)	Silver (1,000 fine ounces)
LEAD AND ZINC ORES									
UNITED STATES, TOTAL									
Production and shipments:									
Crude ores mined in the lead and zinc ores industry, total.	1963	14,154	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	14,405	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
From underground operations.....	1963	13,833	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	14,358	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
From open-pit operations.....	1963	321	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	47	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Mined in the lead ores subindustry.....	1963	4,563	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	8,761	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Mined in the zinc ores subindustry.....	1963	9,591	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	5,644	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Ores and residues for shipment to—									
Smelters.....	1963	359	359	5,353	255	20,543	91,688	1.9	506
	1958	(X)	260	5,184	1,624	38,039	30,691	20.2	1,611
Mills.....	1963	4,069	4,065	15,977	8,816	88,509	359,003	22.2	3,533
	1958	(X)	2,688	16,740	6,669	89,130	221,257	18.8	3,347
Lead concentrates <sup>7</sup> .....	1963	329	329	43,259	4,747	429,984	29,790	32.1	5,696
	1958	383	383	34,813	6,196	496,097	29,185	52.4	8,166
Zinc concentrates <sup>7</sup> .....	1963	840	882	62,108	4,367	14,133	1,015,827	9.4	2,031
	1958	758	753	42,679	5,255	28,834	864,198	12.3	2,128
Minerals milled in the lead and zinc ores industry:									
Mined and milled at same establishment, total.....	1963	9,845	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	11,927	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
In the lead ores subindustry.....	1963	4,084	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	8,385	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
In the zinc ores subindustry.....	1963	5,761	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	3,542	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Received from other establishments for milling.....	1963	(X)	4,647	26,113	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	(X)	2,924	21,517	(NA)	(NA)	(NA)	(NA)	(NA)
<u>Northeast and North Central</u>									
Production and shipments:									
Crude ores mined in the lead and zinc ores industry.....	1963	5,484	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	7,947	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Ores and residues for shipment to mills.....	1963	672	672	1,789	-	5,340	99,899	-	-
	1958	(X)	983	2,284	1	3,248	57,104	-	(D)
Lead concentrates <sup>7</sup> .....	1963	118	118	16,005	-	172,832	141	-	168
	1958	164	164	23,562	406	237,715	15	-	235
Zinc concentrates <sup>7</sup> .....	1963	223	223	15,933	-	-	339,696	-	-
	1958	192	192	8,609	-	4,570	257,592	-	-
Minerals milled in the lead and zinc ores industry.....	1963	45,372	(4)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	48,238	(4)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)
<u>Missouri</u>									
Production and shipments:									
Crude ores mined in the lead ores subindustry from under-ground mines.....	1963	3,347	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	5,929	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Lead and zinc concentrates.....	1963	111	111	15,104	-	161,138	714	-	148
	1958	160	160	23,083	406	230,997	798	-	224
<u>South</u>									
Production and shipments:									
Crude ores mined in the lead and zinc ores industry.....	1963	4,032	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	2,673	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Ores and residues for shipment to mills.....	1963	1,659	1,659	3,532	-	6,302	116,424	-	-
	1958	(X)	908	2,021	-	7,468	44,768	(D)	(D)
Lead concentrates <sup>7</sup> .....	1963	13	13	1,262	-	18,606	220	-	2
	1958	12	12	1,514	-	17,289	640	-	-
Zinc concentrates <sup>7</sup> .....	1963	254	254	18,228	-	969	236,575	(Z)	(D)
	1958	160	158	9,912	-	1,734	197,670	-	-
Minerals milled in the lead and zinc ores industry.....	1963	44,434	(4)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	42,891	(4)	(D)	(NA)	(NA)	(NA)	(NA)	(NA)
<u>West</u>									
Production and shipments:									
Crude ores mined in the lead and zinc ores industry.....	1963	4,638	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	3,785	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Ores and residues for shipment to mills.....	1963	1,679	1,674	10,666	8,816	76,866	142,681	22.2	3,532
	1958	(X)	797	12,435	6,668	78,414	119,385	18.8	3,311

See footnotes at end of table.

TABLE 6A. Primary Products of the Industries, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	Year <sup>1</sup>	Production (1,000 short tons)	Shipments including interplant transfers or receipts for treatment		Gross quantity of metals contained <sup>2</sup>				
			Quantity (1,000 short tons)	Value (\$1,000)	Copper (1,000 pounds)	Lead (1,000 pounds)	Zinc (1,000 pounds)	Gold (1,000 fine ounces)	Silver (1,000 fine ounces)
LEAD AND ZINC ORES—Continued									
West—Continued									
Production and shipments—Continued									
Lead concentrates <sup>7</sup> .....	1963	198	198	25,992	4,747	238,546	29,429	32.1	5,526
	1958	207	207	29,737	5,790	241,093	28,530	52.4	7,931
Zinc concentrates <sup>7</sup> .....	1963	406	404	27,947	4,367	13,164	439,556	9.4	2,031
	1958	406	403	24,158	5,255	22,530	408,936	12.3	2,128
Minerals milled in the lead and zinc ores industry:									
Mined and milled at same establishment.....	1963	2,786	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	2,723	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Received from other establishments for milling.....	1963	(X)	1,811	14,003	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	(X)	999	17,045	(NA)	(NA)	(NA)	(NA)	(NA)
Montana									
Production and shipments:									
Crude ores mined in the lead and zinc ores industry, total.	1963	1,213	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	322	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
From underground operations.....	1963	911	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	316	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
From open-pit operations.....	1963	302	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	6	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Ores and residues for shipment to smelters and mills....	1963	1,213	1,213	3,951	5,132	10,854	71,288	6.5	2,254
	1958	(X)	312	4,094	1,827	7,711	37,712	3.1	890
Lead and zinc concentrates <sup>8</sup> .....	1963	49	46	4,761	1,997	3,160	48,732	2.3	1,099
	1958	95	97	7,941	2,880	20,808	71,030	4.2	1,449
Idaho									
Production and shipments:									
Crude ores mined in the lead and zinc ores industry.....	1963	984	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	873	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Ores and residues for shipment to smelters.....	1963	15	15	172	-	1,810	268	-	23
	1958	(X)	12	142	11	908	632	0.3	20
Lead concentrates <sup>7</sup> .....	1963	81	81	11,068	-	105,422	13,909	-	2,532
	1958	73	73	11,542	560	94,167	11,586	1.2	3,668
Zinc concentrates <sup>7</sup> .....	1963	98	98	6,700	-	4,731	105,462	(2)	388
	1958	74	74	3,923	67	3,732	75,468	0.8	315
Minerals milled in the lead and zinc ores industry.....									
	1963	962	-	-	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	853	( <sup>4</sup> )	(D)	(NA)	(NA)	(NA)	(NA)	(NA)
Utah									
Production and shipments:									
Crude ores mined in the lead and zinc ores industry.....	1963	645	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	522	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Ores and residues for shipment to smelters.....	1963	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
	1958	(X)	10,522	109,058	104,552	1080,181	1087,803	1026.2	101,769
Lead and zinc concentrates <sup>7</sup> .....	1963	9266	9266	916,568	94,632	9108,163	997,117	924.3	92,820
	1958	126	126	11,274	3,529	76,837	80,037	16.3	2,375
LODE GOLD									
UNITED STATES									
Production and shipments:									
Crude ores mined in the lode gold industry, total.....	1963	2,514	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	2,358	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
From underground operations.....	1963	2,130	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	2,123	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
From open-pit operations.....	1963	384	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	235	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Ore and residues for shipment to—									
Smelters.....	1963	25	25	315	-	6	6	5.8	27
	1958	(X)	92	1,192	2,776	199	485	45.9	932
Mills.....	1963	(X)	-	-	-	-	-	-	-
	1958	(X)	92	1,272	44	(D)	(D)	43.1	51
Gold concentrates.....	1963	30	30	3,722	( <sup>11</sup> )	( <sup>11</sup> )	( <sup>11</sup> )	95.7	319
	1958	28	101	3,790	1,222	653	1,132	91.4	657
Gold mill bullion and precipitates, total.....	1963	(X)	(X)	22,933	(X)	(X)	(X)	652.9	71
	1958	(X)	(X)	24,090	(X)	(X)	(X)	680.3	345
Recovered by amalgamation.....	1963	(X)	(X)	15,238	(X)	(X)	(X)	435.2	(D)
	1958	(X)	(X)	15,461	(X)	(X)	(X)	438.9	100
Recovered by cyanidation.....	1963	(X)	(X)	7,695	(X)	(X)	(X)	217.7	(D)
	1958	(X)	(X)	8,629	(X)	(X)	(X)	241.4	245
Minerals milled in the lode gold industry.....									
	1963	2,116	-	-	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	2,288	( <sup>4</sup> )	(D)	(NA)	(NA)	(NA)	(NA)	(NA)

See footnotes at end of table.



TABLE 6A. Primary Products of the Industries, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	Year <sup>1</sup>	Production (1,000 short tons)	Shipments including interplant transfers or receipts for treatment		Gross quantity of metals contained <sup>2</sup>				
			Quantity (1,000 short tons)	Value (\$1,000)	Copper (1,000 pounds)	Lead (1,000 pounds)	Zinc (1,000 pounds)	Gold (1,000 fine ounces)	Silver (1,000 fine ounces)
LODE GOLD—Continued									
<u>South Dakota</u>									
Production and shipments:									
Crude ores mined in the lode gold industry.....	1963	1,914	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	1,824	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Gold mill bullion and precipitates.....	1963	(X)	(X)	20,185	(X)	(X)	(X)	576.7	-
	1958	(X)	(X)	20,062	(X)	(X)	(X)	570.8	153
Minerals mined and milled at same establishment in the lode gold industry.....	1963	1,914	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	1,824	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
PLACER GOLD									
<u>UNITED STATES</u>									
Production and shipments:									
Placer gold.....	1963	<sup>12</sup> 193.7	<sup>12</sup> 193.7	6,791	(X)	(X)	(X)	193.7	(X)
	1958	<sup>12</sup> 362.1	<sup>12</sup> 362.5	12,580	(X)	(X)	(X)	362.5	(X)
Placer silver.....	1963	<sup>12</sup> 17	<sup>12</sup> 17	20	(X)	(X)	(X)	(X)	17
	1958	<sup>12</sup> 51	<sup>12</sup> 51	41	(X)	(X)	(X)	(X)	51
Gravel washed in the placer gold industry to recover placer gold and silver.....	1963	<sup>13</sup> 23,774	(X)	(X)	(X)	(X)	(X)	(NA)	(NA)
	1958	<sup>13</sup> 46,056	(X)	(X)	(X)	(X)	(X)	(NA)	(NA)
SILVER ORES									
<u>UNITED STATES</u>									
Production and shipments:									
Crude ore mined in the silver ores industry, total.....	1963	916	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	496	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
From underground operations.....	1963	843	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	454	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
From open-pit operations.....	1963	73	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	42	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Ore and residues for shipment to—									
Smelters.....	1963	123	123	1,346	1,366	474	140	4.0	1,118
	1958	(NA)	102	1,419	2,985	1,204	247	7.0	1,383
Mills.....	1963	-	-	-	-	-	-	-	-
	1958	(NA)	8	136	45	370	341	0.8	67
Silver concentrates and silver mill bullion.....	1963	<sup>6</sup> 64	<sup>6</sup> 64	24,598	<sup>6</sup> 119,063	<sup>6</sup> 1156,529	<sup>6</sup> 114,372	18.9	15,093
	1958	<sup>6</sup> 21	<sup>6</sup> 21	11,674	<sup>6</sup> 6,496	<sup>6</sup> 5,261	<sup>6</sup> 392	1.4	11,851
Minerals milled in the silver ores industry.....	1963	<sup>4</sup> 816	( <sup>4</sup> )	(D)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	<sup>4</sup> 459	( <sup>4</sup> )	(D)	(NA)	(NA)	(NA)	(NA)	(NA)
<u>Idaho</u>									
Production and shipments:									
Crude ore mined in the silver ores industry.....	1963	507	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	440	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Ore and residues for shipment to smelters.....	1963	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
	1958	(X)	16	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
Silver concentrates and silver mill bullion.....	1963	<sup>9</sup> 49	<sup>9</sup> 49	<sup>9</sup> 20,926	<sup>9</sup> 6,636	(D)	(D)	(D)	<sup>9</sup> 13,709
	1958	21	21	<sup>9</sup> 11,681	<sup>9</sup> 6,476	<sup>9</sup> 5,272	<sup>9</sup> 401	<sup>9</sup> 2.1	<sup>9</sup> 11,861
Minerals milled in the silver ores industry.....	1963	<sup>4</sup> 501	( <sup>4</sup> )	(D)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	424	-	-	(NA)	(NA)	(NA)	(NA)	(NA)
<u>Other States</u>									
Production and shipments:									
Crude ore mined in the silver ores industry.....	1963	409	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	56	(X)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)
Ore and residues for shipment to—									
Mills.....	1963	-	-	-	-	-	-	-	-
	1958	(NA)	8	136	45	370	341	0.8	67
Smelters.....	1963	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
	1958	(NA)	86	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )	( <sup>9</sup> )
Silver concentrates and silver mill bullion.....	1963	<sup>6</sup> 138	<sup>6</sup> 138	<sup>9</sup> 5,018	<sup>6</sup> 3,500	(D)	(D)	(D)	<sup>9</sup> 2,501
	1958	(Z)	(Z)	<sup>9</sup> 1,412	<sup>9</sup> 3,005	<sup>9</sup> 1,193	<sup>9</sup> 238	<sup>9</sup> 6.3	<sup>9</sup> 1,372
Minerals milled in the silver ores industry.....	1963	315	-	-	(NA)	(NA)	(NA)	(NA)	(NA)
	1958	<sup>4</sup> 35	( <sup>4</sup> )	(D)	(NA)	(NA)	(NA)	(NA)	(NA)

Footnotes on next page.

TABLE 6A. Primary Products of the Industries, by Geographic Areas: 1963 and 1958—Continued

Footnotes for Table 6A.--10C

- Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.
- (2) Less than one-half of the unit of measure specified.
- <sup>1</sup>The 1958 figures for copper ores, lead ores, and lode gold exclude data for Alaska; for copper ores, less than 15 thousand pounds of copper were contained in shipments of ores and residues from Alaska which were valued at less than \$10 thousand; for lead ores in Alaska, the value of shipments was less than \$5 thousand, the ores containing less than 20 thousand pounds of lead; and for lode gold, less than 40 tons were reported mined in Alaska and 44 tons of crude ore and residues and less than 2 tons of concentrates were shipped, containing a total of 174 ounces of gold and 20 ounces of silver.
- <sup>2</sup>Represents metal content of production where both production and shipments are shown.
- <sup>3</sup>Figures for zinc content of copper ore for shipment to smelters is included with figure for zinc content of copper concentrates.
- <sup>4</sup>Minerals received from other establishments for milling are combined with minerals mined and milled at the same establishment.
- <sup>5</sup>Figure for silver content of copper ore for shipment to smelters is included with figure for silver content of copper concentrates.
- <sup>6</sup>Represents concentrates only.
- <sup>7</sup>Represents net concentrates. Excludes concentrates transferred from one establishment to another within the Lead and Zinc Ores Industry for further treatment.
- <sup>8</sup>For 1963, represents zinc concentrates only. No lead concentrates were produced.
- <sup>9</sup>Figures for ores and residues for shipment to smelters are included with those for concentrates.
- <sup>10</sup>Includes data for crude ores for shipment to mills.
- <sup>11</sup>Figures for gold concentrates are included with those for silver concentrates.
- <sup>12</sup>Represents thousands of fine ounces.
- <sup>13</sup>Represents thousands of cubic yards.

TABLE 6B. Product Classes—Indexes of Production and Unit Value for Primary Products Shipped by All Producers: 1963 and 1958

Product code	Product and year	Indexes (1954 = 100)	
		Production <sup>1</sup>	Unit value
1021	Copper ores.....1963...	142	95
	.....1958...	117	80
	Crude ore and residues mined in the copper ores industry for shipment to smelters.....1963...	63	73
	.....1958...	83	89
	Copper concentrates.....1963...	146	95
	.....1958...	119	79
1031	Copper precipitates.....1963...	184	97
	.....1958...	128	87
	Lead and zinc ores.....1963...	89	90
	.....1958...	91	82
	Crude ores and residues mined in the lead and zinc ores industry for shipment to smelters.....1963...	81	97
	.....1958...	83	93
104	Lead concentrates.....1963...	71	80
	.....1958...	85	86
	Zinc concentrates.....1963...	118	94
	.....1958...	101	75
	Gold and silver ores.....1963...	101	109
	.....1958...	103	99
1041	Lode gold.....1963...	97	101
	.....1958...	107	99
	Crude ore and residues mined in the lode gold industry for shipment to smelters.....1963...	21	198
	.....1958...	278	57
	Gold concentrates, mill bullion, and precipitates..1963...	98	102
	.....1958...	104	100
1043	Placer gold.....1963...	46	101
	.....1958...	87	100
1044	Silver ores.....1963...	178	121
	.....1958...	112	97
	Crude ores and residues mined in the silver ores industry for shipment to smelters.....1963...	134	172
	.....1958...	201	121
	Silver concentrates and silver mill bullion.....1963...	183	118
	.....1958...	107	96

<sup>1</sup>The quantity used in measuring production is based on the quantity of metals contained in ores, residues, concentrates, bullion, and precipitates produced or shipped.

TABLE 6C. Shipments of Primary Products Distributed by Value Per Ton: 1963

Product and average value per short ton f.o.b. mine or plant <sup>1</sup>	Quantity shipped		Value of shipments		Product and average value per short ton f.o.b. mine or plant <sup>1</sup>	Quantity shipped		Value of shipments	
	Quantity (1,000 short tons)	Percent of total	Value (\$1,000)	Percent of total		Quantity (1,000 short tons)	Percent of total	Value (\$1,000)	Percent of total
COPPER ORES INDUSTRY					LEAD AND ZINC ORES INDUSTRY—Continued				
Crude copper ores and residues shipped to smelters, total.....	3,693	100.0	13,307	100.0	Lead concentrates—Continued				
Less than \$4.85.....	3,342	90.5	4,771	35.8	\$112.00 to \$125.99.....	108	32.8	12,586	29.1
\$4.85 to \$20.49.....	2	0.1	22	0.2	\$126.00 and over.....	192	58.4	27,942	64.6
\$20.50 and over.....	349	9.4	8,514	64.0	Zinc concentrates, total.....	882	100.0	62,108	100.0
Copper concentrates, total.....	4,257	100.0	468,311	100.0	Less than \$54.50.....	148	16.8	5,840	9.4
Less than \$78.50.....	784	18.5	51,073	10.9	\$54.50 to \$61.49.....	133	15.1	7,844	12.6
\$88.50 to \$125.99.....	2,323	54.5	232,529	49.7	\$61.50 to \$69.49.....	171	19.4	11,523	18.6
\$126.00 to \$141.99.....	410	9.6	56,035	12.0	\$69.50 to \$78.49.....	235	26.6	16,794	27.0
\$142.00 to \$159.99.....	113	2.6	16,592	3.5	\$78.50 to \$99.99.....	51	5.8	4,145	6.7
\$160.00 to \$179.99.....	310	7.3	50,753	10.8	\$100.00 and over.....	144	16.3	15,962	25.7
\$180.00 and over.....	317	7.5	61,329	13.1	LODE GOLD INDUSTRY				
Copper precipitates, total.....	169	100.0	50,615	100.0	Crude lode gold ores and residues shipped to smelters, total.....	25	100.0	315	100.0
Less than \$205.00.....	36	21.3	5,013	9.9	Less than \$6.95.....	9	36.0	43	13.7
\$205.00 to \$294.99.....	49	29.0	13,114	25.9	\$6.95 to \$11.19.....	7	28.0	65	20.6
\$295.00 and over.....	84	49.7	32,488	64.2	\$14.19 to \$20.49.....	3	12.0	46	14.6
LEAD AND ZINC ORES INDUSTRY					\$20.50 to \$25.99.....	3	12.0	69	21.9
Crude lead and zinc ores and residues shipped to smelters, total.....	359	100.0	5,353	100.0	\$29.50 to \$33.49.....	2	8.0	50	15.9
Less than \$18.00.....	338	94.2	4,528	84.6	\$33.50 and over.....	1	4.0	42	13.3
\$18.00 to \$22.99.....	7	1.9	126	2.4	SILVER ORES INDUSTRY				
\$23.00 to \$54.49.....	10	2.8	377	7.0	Crude silver ores and residues shipped to smelters, total.....	123	100.0	1,346	100.0
\$54.50 and over.....	4	1.1	322	6.0	Less than \$6.15.....	71	57.8	119	8.8
Lead concentrates, total.....	329	100.0	43,259	100.0	\$6.15 to \$12.59.....	19	15.4	190	14.1
Less than \$88.50.....	6	1.8	435	1.0	\$13.00 to \$37.99.....	26	21.1	685	50.9
\$88.50 to \$111.99.....	23	7.0	2,296	5.3	\$38.00 and over.....	7	5.7	392	26.2

<sup>1</sup>The "average values" are based on the entire shipments of the specified product by each establishment. Thus they are representative of varied average prices among establishments but not of variations within an establishment.

**TABLE 7A. Supplies Used in the Industries, by Geographic Areas, and Type of Operation:  
1963 and 1958**

(For the quantity and cost of minerals received for treatment, see Table 6A. For the quantity and total cost of purchased fuels and electric energy used, see Table 3.)

Geographic area, and type of operation	1963		1958 <sup>1</sup>		Geographic area, and type of operation	1963		1958 <sup>1</sup>	
	Quantity	Cost (\$1,000)	Quantity	Cost (\$1,000)		Quantity	Cost (\$1,000)	Quantity	Cost (\$1,000)
1021.—COPPER ORES INDUSTRY					1031.—LEAD AND ZINC ORES INDUSTRY--Con.				
<u>Geographic Area</u>					<u>Geographic Area—Continued</u>				
United States:					Northeast and North Central:				
Supplies used, total.....	(X)	108,493	(X)	86,537	Explosives.....1,000 pounds..	3,151	664	4,661	986
Explosives.....1,000 pounds..	61,711	5,256	50,355	5,244	Steel mill shapes				
Steel mill shapes					and forms.....short tons..	3,488	1,331	5,853	2,134
and forms.....short tons..	169,986	19,869	71,692	11,386	Missouri:				
All other supplies.....	(X)	83,351	(X)	69,503	Explosives.....1,000 pounds..	1,120	251	2,864	597
Undistributed.....	(X)	17	(X)	404	Steel mill shapes				
Montana:					and forms.....short tons..	2,529	1,010	5,174	1,942
Supplies used, total.....	(X)	12,383	(X)	8,100	South:				
Explosives.....1,000 pounds..	853	205	4,763	364	Explosives.....1,000 pounds..	2,480	358	2,208	459
Steel mill shapes					Steel mill shapes				
and forms.....short tons..	10,856	3,301	2,514	464	and forms.....short tons..	2,638	382	1,751	368
All other supplies.....	(X)	8,875	(X)	7,249	West:				
Undistributed.....	(X)	2	(X)	23	Explosives.....1,000 pounds..	4,029	727	4,542	918
Arizona:					Steel mill shapes				
Supplies used, total.....	(X)	284,362	(X)	244,037	and forms.....short tons..	5,319	1,332	7,173	1,416
Explosives.....1,000 pounds..	40,718	3,137	24,637	2,641	Utah:				
Steel mill shapes					Explosives.....1,000 pounds..	790	137	774	157
and forms.....short tons..	46,028	8,163	31,646	4,998	Steel mill shapes				
All other supplies.....	(X)	273,047	(X)	236,305	and forms.....short tons..	1,778	459	852	249
Undistributed.....	(X)	15	(X)	93	<u>Type of Operation</u>				
Other States:					Producing establishments:				
Supplies used, total.....	(X)	2109,329	(X)	2100,558	Supplies used, total.....	(X)	22,545	(X)	20,349
Explosives.....1,000 pounds..	20,141	1,914	20,955	2,239	Explosives.....1,000 pounds..	9,615	1,740	11,322	2,345
Steel mill shapes					Steel mill shapes				
and forms.....short tons..	113,102	8,405	37,532	5,924	and forms.....short tons..	11,417	3,033	14,690	3,898
All other supplies.....	(X)	299,010	(X)	292,107	All other supplies.....	(X)	16,391	(X)	13,334
Undistributed.....	(X)	-	(X)	288	Undistributed.....	(X)	1,381	(X)	772
<u>Type of Operation</u>					Underground mines without treatment				
Producing establishments:					plants:				
Supplies used, total.....	(X)	108,272	(X)	86,032	Supplies used, total.....	(X)	3,378	(X)	4,254
Explosives.....1,000 pounds..	61,690	5,253	50,355	5,244	Explosives.....1,000 pounds..	2,833	399	2,804	618
Steel mill shapes					Steel mill shapes				
and forms.....short tons..	169,968	19,865	71,692	11,386	and forms.....short tons..	1,147	288	1,089	355
All other supplies.....	(X)	83,137	(X)	69,228	All other supplies.....	(X)	1,780	(X)	2,630
Undistributed.....	(X)	17	(X)	174	Undistributed.....	(X)	911	(X)	651
Mines without treatment plants:					Underground mines with treatment				
Supplies used, total.....	(X)	27,681	(X)	(NA)	plants:				
Explosives.....1,000 pounds..	16,724	1,450	(NA)	(NA)	Supplies used, total.....	(X)	14,923	(X)	217,787
Steel mill shapes					Explosives.....1,000 pounds..	6,154	1,293	8,297	1,681
and forms.....short tons..	(X)	26,222	(X)	(NA)	Steel mill shapes				
all other supplies.....short tons..	(X)	9	(X)	(NA)	and forms.....short tons..	8,994	2,508	13,056	3,434
Undistributed.....	(X)	6	(X)	(NA)	All other supplies.....	(X)	11,079	(X)	9,200
Open-pit mines with treatment plants:					Undistributed.....	(X)	43	(X)	23,472
Supplies used, total.....	(X)	257,240	(X)	(NA)	<u>Geographic Area</u>				
Explosives.....1,000 pounds..	36,368	1,980	(NA)	(NA)	United States:				
Steel mill shapes					Supplies used, total.....	(X)	5,340	(X)	25,917
and forms.....short tons..	43,416	7,695	(NA)	(NA)	Explosives.....1,000 pounds..	1,432	308	2,290	451
All other supplies.....	(X)	36,963	(X)	(NA)	Steel mill shapes				
Undistributed.....	(X)	6	(X)	(NA)	and forms.....short tons..	4,242	988	3,002	606
Underground mines with treatment					All other supplies.....	(X)	3,702	(X)	24,578
plants:					Undistributed.....	(X)	342	(X)	282
Supplies used, total.....	(X)	220,576	(X)	19,567	South Dakota: <sup>4</sup>				
Explosives.....1,000 pounds..	8,598	1,533	5,853	1,105	Supplies used, total.....	(X)	3,796	(X)	3,412
Steel mill shapes					Explosives.....1,000 pounds..	1,004	226	1,574	319
and forms.....short tons..	(X)	18,470	(X)	18,432	Steel mill shapes				
Undistributed.....	(X)	2	(X)	30	and forms.....short tons..	2,025	500	2,773	523
<u>Geographic Area</u>					All other supplies.....	(X)	3,070	(X)	2,569
1031.—LEAD AND ZINC ORES INDUSTRY					Undistributed.....	(X)	-	(X)	1
United States:					<u>Geographic Area</u>				
Supplies used, total.....	(X)	22,677	(X)	21,185	United States:				
Explosives.....1,000 pounds..	9,660	1,749	11,411	2,363	Supplies used, total.....	(X)	25,897	(X)	23,431
Steel mill shapes					Explosives.....1,000 pounds..	1,592	308	457	198
and forms.....short tons..	11,445	3,045	14,777	3,918	Steel mill shapes				
All other supplies.....	(X)	16,444	(X)	13,619	and forms.....short tons..	2,753	728	2,321	678
Undistributed.....	(X)	1,439	(X)	1,285	All other supplies.....	(X)	24,304	(X)	22,185
Lead ores subindustry:					Undistributed.....	(X)	557	(X)	370
Supplies used, total.....	(X)	315,886	(X)	12,996	<u>Geographic Area</u>				
Explosives.....1,000 pounds..	2,453	470	6,513	1,328	United States:				
Steel mill shapes					Supplies used, total.....	(X)	25,897	(X)	23,431
and forms.....short tons..	5,235	1,446	8,019	3,112	Explosives.....1,000 pounds..	1,592	308	457	198
All other supplies.....	(X)	313,442	(X)	7,422	Steel mill shapes				
Undistributed.....	(X)	295	(X)	1,134	and forms.....short tons..	2,753	728	2,321	678
Zinc ores subindustry:					All other supplies.....	(X)	24,304	(X)	22,185
Supplies used, total.....	(X)	333,075	(X)	8,189	Undistributed.....	(X)	557	(X)	370
Explosives.....1,000 pounds..	7,207	1,279	4,898	1,035					
Steel mill shapes									
and forms.....short tons..	6,210	1,599	6,758	806					
All other supplies.....	(X)	328,148	(X)	6,197					
Undistributed.....	(X)	1,144	(X)	151					

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Excludes figures for Alaska.

<sup>2</sup>Includes the cost of minerals received from other establishments for treatment.

<sup>3</sup>Includes the cost of minerals received from other establishments for treatment.

**TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954**

Industry, geographic area, and type of operation	Aggregate horsepower per production worker		1963 (1,000 hp.)									
			Aggregate horsepower (prime movers and electric motors driven by purchased energy)					Prime movers (horsepower)				
	1963	1954	Total	By type of equipment			Total	By type of equipment			All other equipment	
				Loading equipment	Transportation equipment			Loading equipment	Transportation equipment			
					Highway type	Other			Highway type	Other		
1021.—COPPER ORES INDUSTRY												
TOTAL.....	88	72	1,886	104	200	675	907	963	35	200	387	341
<u>Geographic Area</u>												
Montana.....	79	(NA)	231	20	27	78	106	110	6	27	71	6
Arizona.....	92	78	960	48	106	328	478	535	20	106	232	177
<u>Type of Operation</u>												
Producing establishments, total.....	88	73	1,859	102	197	671	887	956	34	197	385	340
Mines only.....	79	50	631	53	72	336	170	272	11	72	142	47
Mines with treatment plants:												
Open pits.....	114	82	726	43	72	279	332	432	18	72	221	121
Underground mines.....	60	(NA)	254	3	25	48	176	130	2	25	18	85
Treatment plants only.....	95	107	248	3	28	8	209	122	3	28	4	87
1031.—LEAD AND ZINC ORES INDUSTRY												
TOTAL.....	56	55	435	32	45	87	271	95	16	45	18	16
Lead ores subindustry.....	61	59	207	9	20	50	128	34	4	20	7	3
Zinc ores subindustry.....	52	51	228	23	25	37	143	61	12	25	11	13
<u>Geographic Area</u>												
Northeast and North Central.....	65	49	156	7	15	46	88	25	2	15	7	1
Missouri.....	76	62	99	5	7	37	50	13	1	7	5	-
South.....	69	73	87	9	6	19	53	21	7	6	4	4
East South Central (Tennessee).....	80	(NA)	61	7	4	16	34	16	5	4	3	4
West.....	46	49	190	15	24	22	129	49	7	24	7	11
Montana.....	37	28	18	2	1	1	14	2	1	1	(2)	(2)
Idaho.....	44	39	65	2	8	6	49	15	2	8	2	3
Utah.....	58	63	53	3	5	9	36	8	2	5	1	(2)
<u>Type of Operation</u>												
Producing establishments.....	54	52	417	31	43	84	259	90	15	43	17	15
Mines without treatment plants:												
Underground mines.....	61	41	86	6	12	17	51	18	3	12	1	2
Open stoping.....	64	(NA)	37	4	8	6	19	14	3	8	1	2
Mines with treatment plants:												
Underground mines.....	53	47	286	21	28	65	172	64	9	28	15	12
Open stoping.....	65	(NA)	196	16	9	58	113	35	7	9	11	8
Treatment plants only.....	60	205	30	1	2	-	27	3	1	2	-	(2)
Lead ores subindustry:												
Producing establishments.....	60	59	199	9	19	49	122	33	4	19	7	3
Mines with treatment plants:												
Underground mines.....	57	(NA)	145	6	14	40	85	26	2	14	7	3
Open stoping.....	68	(NA)	93	5	(2)	37	51	6	1	(2)	5	-
Zinc ores subindustry:												
Producing establishments.....	50	51	218	22	24	35	137	57	11	24	10	12
Mines with treatment plants:												
Underground mines.....	49	(NA)	141	15	14	25	87	39	8	14	8	9
Open stoping.....	62	(NA)	103	11	9	21	62	29	6	8	7	8
1042.—LODE GOLD INDUSTRY												
TOTAL.....	40	51	83	5	12	16	50	31	3	12	1	15
<u>Geographic Area</u>												
North Central (South Dakota).....	34	24	53	2	3	14	34	17	(2)	3	-	14
South and West.....	56	(NA)	30	3	9	2	17	14	3	9	1	1
<u>Type of Operation</u>												
Producing establishments.....	39	39	74	4	10	15	45	27	2	10	(2)	15
1043.—PLACER GOLD INDUSTRY												
TOTAL.....	308	129	100	14	9	13	64	51	2	9	11	29
<u>Geographic Area</u>												
Pacific.....	312	125	96	14	8	12	62	50	2	8	11	29
<u>Type of Operation</u>												
Producing establishments.....	290	(NA)	94	13	8	12	61	49	1	8	11	29
1044.—SILVER ORES INDUSTRY												
TOTAL.....	49	34	57	2	16	11	28	24	2	16	2	4
<u>Geographic Area</u>												
Mountain.....	48	33	55	2	14	12	27	22	2	14	2	4
Idaho.....	38	24	31	1	5	8	17	7	1	5	(2)	1
<u>Type of Operation</u>												
Producing establishments.....	43	31	46	2	10	9	25	16	1	10	1	4
Underground mines with treatment plants..	41	(NA)	43	1	7	10	25	13	1	7	1	4

See footnotes at end of table.

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954—Continued

Industry, geographic area, and type of operation	1963 (1,000 hp.)--Continued							
	Prime movers (horsepower)--Continued		Electric motors (horsepower)					
	By use		Total	By type of equipment			By source of power	
	Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated at same establishment
1021.—COPPER ORES INDUSTRY								
TOTAL.....	320	643	1,168	80	314	774	923	245
<u>Geographic Area</u>								
Montana.....	2	108	121	14	7	100	121	-
Arizona.....	152	383	556	35	116	405	425	131
<u>Type of Operation</u>								
Producing establishments, total.....	319	637	1147	79	312	756	902	245
Mines only.....	38	234	372	42	197	133	359	13
Mines with treatment plants:								
Open pits.....	102	330	367	33	66	268	294	73
Underground mines.....	95	35	212	4	43	165	123	89
Treatment plants only.....	84	38	196	(Z)	6	190	126	70
1031.—LEAD AND ZINC ORES INDUSTRY								
TOTAL.....	8	87	344	16	68	260	340	4
Lead ores subindustry.....	(Z)	34	173	5	42	126	173	(Z)
Zinc ores subindustry.....	8	53	171	11	26	134	167	4
<u>Geographic Area</u>								
Northeast and North Central.....	-	25	131	5	39	87	131	-
Missouri.....	-	13	86	4	32	50	86	-
South.....	(Z)	21	66	2	15	49	66	-
East South Central (Tennessee).....	(Z)	16	45	2	13	30	45	-
West.....	8	41	145	9	14	122	141	4
Montana.....	2	(Z)	16	2	(Z)	14	16	-
Idaho.....	(Z)	15	50	-	4	46	50	(Z)
Utah.....	1	7	45	1	8	36	45	-
<u>Type of Operation</u>								
Producing establishments.....	8	82	331	16	67	248	327	4
Mines without treatment plants:								
Underground mines.....	(Z)	18	68	3	16	49	68	-
Open stopping.....	(Z)	14	23	1	5	17	23	-
Mines with treatment plants:								
Underground mines.....	7	57	226	12	50	164	222	4
Open stopping.....	5	30	165	9	47	109	161	4
Treatment plants only.....	-	3	27	(Z)	-	27	27	-
Lead ores subindustry:								
Producing establishments.....	(Z)	33	166	5	41	120	166	(Z)
Mines with treatment plants:								
Underground mines.....	(Z)	26	119	4	33	82	119	-
Open stopping.....	-	6	87	4	32	51	87	-
Zinc ores subindustry:								
Producing establishments.....	8	49	165	11	26	128	161	4
Mines with treatment plants:								
Underground mines.....	7	32	106	8	17	81	102	4
Open stopping.....	5	24	78	5	15	58	73	4
1042.—LODE GOLD INDUSTRY								
TOTAL.....	13	18	69	3	22	44	52	17
<u>Geographic Area</u>								
North Central (South Dakota).....	13	4	53	3	21	29	36	17
South and West.....	(Z)	14	16	(Z)	1	15	16	(Z)
<u>Type of Operation</u>								
Producing establishments.....	13	14	64	3	22	39	47	17
1043.—PLACER GOLD INDUSTRY								
TOTAL.....	27	24	54	12	1	41	49	5
<u>Geographic Area</u>								
Pacific.....	27	23	51	12	1	38	46	5
<u>Type of Operation</u>								
Producing establishments.....	27	22	50	12	1	37	45	5
1044.—SILVER ORES INDUSTRY								
TOTAL.....	3	21	34	(Z)	9	25	33	1
<u>Geographic Area</u>								
Mountain.....	3	19	34	(Z)	9	25	33	1
Idaho.....	(Z)	7	24	(Z)	8	16	24	(Z)
<u>Type of Operation</u>								

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with average employment of—						
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1021.—COPPER ORES INDUSTRY								
Establishments, total.....number..	160	125	3	5	11	8	7	1
Reporting water use, total.....do....	85	50	3	5	11	8	7	1
By source of water:								
Utility.....do....	10	4	-	-	2	1	2	1
Other than utility.....do....	50	25	1	5	9	5	5	-
Source not specified.....do....	25	21	2	-	-	2	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	42	39	1	1	-	1	-	-
1 to 9 million gallons.....do....	7	5	-	1	1	-	-	-
10 to 19 million gallons.....do....	3	1	1	-	-	-	1	-
20 to 99 million gallons.....do....	5	2	-	1	-	1	-	1
100 million gallons and over.....do....	28	3	1	2	10	6	6	-
Employees.....do....	126,486	507	198	751	3,933	5,301	13,829	(D)
At establishments reporting water use.....do....	24,413	401	198	751	3,933	5,301	13,829	(D)
Value added in mining.....\$1,000..	417,089	2,786	1,242	12,346	79,942	98,732	222,041	(D)
Value added at establishments reporting water use.....do....	416,391	2,088	1,242	12,346	79,942	98,732	222,041	(D)
1031.—LEAD AND ZINC ORES INDUSTRY								
Establishments, total.....number..	125	116	1	5	1	1	1	-
Reporting water use, total.....do....	31	22	1	5	1	1	1	-
By source of water:								
Utility.....do....	4	3	-	-	-	-	1	-
Other than utility.....do....	22	15	1	4	1	1	-	-
Source not specified.....do....	5	4	-	1	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	20	20	-	-	-	-	-	-
1 to 9 million gallons.....do....	1	1	-	-	-	-	-	-
10 to 19 million gallons.....do....	-	-	-	-	-	-	-	-
20 to 99 million gallons.....do....	1	1	-	-	-	-	-	-
100 million gallons and over.....do....	9	-	1	5	1	1	1	-
Employees.....do....	14,320	373	992	(D)	2,725	(D)	(D)	-
At establishments reporting water use.....do....	3,869	152	992	(D)	2,725	(D)	(D)	-
Value added in mining.....\$1,000..	34,046	1,806	12,723	(D)	19,517	(D)	(D)	-
Value added at establishments reporting water use.....do....	32,786	546	12,723	(D)	19,517	(D)	(D)	-
Zinc Ores Subindustry								
Establishments, total.....number..	80	59	5	7	8	1	-	-
Reporting water use, total.....do....	58	37	5	7	8	1	-	-
By source of water:								
Utility.....do....	9	2	1	5	1	-	-	-
Other than utility.....do....	27	19	2	1	4	1	-	-
Source not specified.....do....	22	16	2	1	3	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	22	22	-	-	-	-	-	-
1 to 9 million gallons.....do....	2	1	-	-	1	-	-	-
10 to 19 million gallons.....do....	5	1	2	-	2	-	-	-
20 to 99 million gallons.....do....	9	5	-	3	1	-	-	-
100 million gallons and over.....do....	20	8	3	4	4	1	-	-
Employees.....do....	15,702	651	1,428	(D)	2,957	(D)	-	-
At establishments reporting water use.....do....	4,972	587	1,428	(D)	2,957	(D)	-	-
Value added in mining.....\$1,000..	50,327	6,625	12,565	(D)	31,137	(D)	-	-
Value added at establishments reporting water use.....do....	49,697	5,995	12,565	(D)	31,137	(D)	-	-
1042.—LODE GOLD INDUSTRY								
Establishments, total.....number..	201	198	1	1	-	-	1	-
Reporting water use, total.....do....	42	39	1	1	-	-	1	-
By source of water:								
Utility.....do....	6	6	-	-	-	-	-	-
Other than utility.....do....	20	17	1	1	-	-	1	-
Source not specified.....do....	16	16	-	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	36	36	-	-	-	-	-	-
1 to 9 million gallons.....do....	2	2	-	-	-	-	-	-
10 to 19 million gallons.....do....	-	-	-	-	-	-	-	-
20 to 99 million gallons.....do....	1	-	1	-	-	-	-	-
100 million gallons and over.....do....	3	1	-	1	-	-	1	-

See footnotes at end of table.

TABLE 7C Water Use in the Industries, by Employment Size of Establishment: 1963—Con.

Item	Establishments, total	Establishments with average employment of—						
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1042.—LODE GOLD INDUSTRY--Continued								
Employees.....number..	2,397	384	<u>2,013</u>	(D)	-	-	(D)	-
At establishments reporting water use.....do....	2,180	167	<u>2,013</u>	(D)	-	-	(D)	-
Value added in mining.....\$1,000..	21,312	1,546	<u>19,766</u>	(D)	-	-	(D)	-
Value added at establishments reporting water use.....do....	20,931	1,165	<u>19,766</u>	(D)	-	-	(D)	-
1043.—PLACER GOLD INDUSTRY								
Establishments, total.....number..	158	156	1	1	-	-	-	-
Reporting water use, total.....do....	10	8	1	1	-	-	-	-
By source of water:								
Utility.....do....	1	1	-	-	-	-	-	-
Other than utility.....do....	5	3	1	1	-	-	-	-
Source not specified.....do....	4	4	-	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	5	5	-	-	-	-	-	-
1 to 9 million gallons.....do....	2	2	-	-	-	-	-	-
10 to 19 million gallons.....do....	-	-	-	-	-	-	-	-
20 to 99 million gallons.....do....	1	1	-	-	-	-	-	-
100 million gallons and over.....do....	2	-	1	1	-	-	-	-
Employees.....do....	361	<u>361</u>	(D)	(D)	-	-	-	-
At establishments reporting water use.....do....	250	<u>250</u>	(D)	(D)	-	-	-	-
Value added in mining.....\$1,000..	5,810	<u>5,810</u>	(D)	(D)	-	-	-	-
Value added at establishments reporting water use.....do....	5,062	<u>5,062</u>	(D)	(D)	-	-	-	-
1044.—SILVER ORES INDUSTRY								
Establishments, total.....number..	107	101	2	3	1	-	-	-
Reporting water use, total.....do....	22	16	2	3	1	-	-	-
By source of water:								
Utility.....do....	2	2	-	-	-	-	-	-
Other than utility.....do....	16	10	2	3	1	-	-	-
Source not specified.....do....	4	4	-	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	13	13	-	-	-	-	-	-
1 to 9 million gallons.....do....	3	2	1	-	-	-	-	-
10 to 19 million gallons.....do....	-	-	-	-	-	-	-	-
20 to 99 million gallons.....do....	-	-	-	-	-	-	-	-
100 million gallons and over.....do....	6	1	1	3	1	-	-	-
Employees.....do....	1,458	<u>348</u>	(D)	<u>1,110</u>	(D)	-	-	-
At establishments reporting water use.....do....	1,349	<u>239</u>	(D)	<u>1,110</u>	(D)	-	-	-
Value added in mining.....\$1,000..	21,904	<u>2,678</u>	(D)	<u>19,226</u>	(D)	-	-	-
Value added at establishments reporting water use.....do....	21,468	<u>2,242</u>	(D)	<u>19,226</u>	(D)	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left. (NA) Not available. (X) Not applicable.

<sup>1</sup>Includes figures for separately reported central offices and related facilities. These were not distributed by size of establishment.



TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963

Type of operation and tons per man-hour <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expendi- tures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
1021.—COPPER ORES INDUSTRY									
All establishments.....	160	226,486	2187,307	21,372	45,319	142,395	417,089	670,173	87,078
Producing establishments.....	90	24,308	168,236	21,183	44,974	141,370	416,996	670,173	85,240
Mines only.....	49	8,710	59,513	7,974	15,918	50,898	124,063	157,456	10,437
Less than 0.30.....	8	1,805	12,340	1,709	3,802	11,324	19,887	23,236	1,274
0.30 to 0.99.....	2								
1.00 to 1.49.....	3								
1.50 to 2.50.....	3								
5.00 to 9.99.....	3	4,445	29,492	3,949	7,798	24,160	65,804	87,506	3,602
Undistributed <sup>3</sup> .....	30	2,460	17,581	2,316	4,318	15,414	38,372	46,714	5,561
Open-pit mines with treatment plants, total...	18	7,399	52,414	6,369	14,720	44,140	184,586	247,273	28,666
Less than 0.030.....	1	2,876	19,525	2,439	5,716	16,017	61,697	78,745	4,901
0.040 to 0.049.....	2								
0.050 to 0.099.....	4								
0.10 to 0.19.....	4								
0.30 to 0.39.....	1	3,929	28,682	3,348	7,788	24,062	104,092	144,147	6,361
2.00 to 2.39.....	1								
Undistributed <sup>2</sup> .....	5	594	4,207	582	1,216	4,061	18,797	24,381	17,404
Underground mines with treatment plants, total.....	15	5,103	36,774	4,222	9,361	30,719	55,158	75,061	8,181
Less than 0.030.....	4	1,289	8,351	952	2,267	6,958	9,190	12,013	335
0.030 to 0.049.....	2								
0.050 to 0.099.....	5								
0.10 to 0.19.....	1								
Undistributed <sup>2</sup> .....	3	3	11	2	3	7	24	21	29
1031.—LEAD AND ZINC ORES INDUSTRY									
All establishments.....	205	29,422	249,337	7,822	14,781	37,935	84,373	135,965	11,896
Producing establishments.....	147	8,948	46,117	7,691	14,437	36,980	84,618	135,965	11,054
Underground mines without treatment plants, total.....	84	1,614	8,093	1,421	2,882	6,802	12,818	17,297	2,295
Less than 0.10.....	10	65	144	57	120	116	94	121	57
0.10 to 0.29.....	6	27	96	22	44	76	101	165	102
0.30 to 0.49.....	8	479	2,622	424	878	2,242	5,284	6,079	240
0.50 to 1.49.....	4	389	1,799	342	679	1,481	3,119	3,875	146
1.50 to 1.99.....	3	72	336	67	130	310	636	710	83
2.00 to 2.99.....	5	125	579	109	230	480	865	1,314	54
3.00 to 4.99.....	6	193	987	169	331	846	1,352	2,515	211
Undistributed <sup>3</sup> .....	42	264	1,530	231	470	1,251	1,367	2,518	1,402
Underground mines with treatment plants, total.....	40	6,264	32,186	5,385	9,984	26,079	62,589	80,431	8,378
Less than 0.030.....	4	2,700	13,088	2,241	3,831	9,991	21,598	26,443	1,431
0.030 to 0.049.....	2								
0.050 to 0.099.....	10								
0.10 to 0.19.....	13								
Undistributed <sup>3</sup> .....	11	234	1,343	217	444	1,263	4,549	6,171	2,004
1044.—SILVER ORES INDUSTRY									
All establishments.....	107	1,458	8,802	1,169	2,330	6,834	21,904	26,060	3,338
Producing establishments.....	57	1,314	8,160	1,072	2,126	6,353	21,587	26,060	2,069
Underground mines with treatment plants, total.....	9	1,252	7,420	1,042	2,076	6,212	20,777	25,227	1,692
Less than 0.030.....	4	535	3,354	411	1,050	2,767	10,623	12,355	1,155
0.030 to 0.049.....	3								
0.050 to 0.099.....	1								
Undistributed <sup>3</sup> .....	1								

<sup>1</sup>Represents tons of primary products of the industry shipped per man-hour worked by production, development, and exploration workers: For mines only represents primarily tons of crude ore shipped per man-hour, for mines with treatment plants represents primarily tons of treated ore shipped per man-hour.

<sup>2</sup>Includes figures for separately reported central offices and related facilities. These were not distributed by type of operation.

<sup>3</sup>Represents establishments with no production, development, or exploration worker man-hours, with man-hours spent on exploration or development work amounting to 30 percent or more of total man-hours of production, development, and exploration workers, with cost of contract work amounting to 30 percent or more of production, development, and exploration worker wages, with number of working proprietors amounting to 30 percent or more of number of production, development, and exploration workers and, for silver ores, number and payroll of employees at separately reported central offices and related facilities.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963

Industry, division, and ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expendi- tures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
1021.--COPPER ORES INDUSTRY									
Total.....	160	26,486	187,307	21,372	45,319	142,395	417,089	670,173	87,078
Less than 0.10.....	2	1,321	9,504	1,167	2,422	8,088	55,896	70,675	17,582
0.10 to 0.19.....	4								
0.20 to 0.29.....	10	4,878	35,154	4,084	9,514	28,704	133,815	193,091	43,588
0.30 to 0.39.....	9	3,688	24,656	3,182	6,385	20,335	71,880	144,688	6,664
0.40 to 0.49.....	4	2,547	18,383	2,405	4,516	16,123	39,392	48,316	5,678
0.50 to 0.59.....	9	4,247	32,306	3,735	8,215	27,660	59,736	87,199	7,501
0.60 to 0.69.....	5	1,315	7,646	1,138	2,424	6,682	12,197	47,638	1,398
0.70 to 0.79.....	3	290	1,372	268	521	1,234	1,745	2,305	235
0.80 to 0.89.....	6	1,755	10,580	1,472	3,047	8,286	12,432	23,504	2,139
0.90 to 0.99.....	5	3,748	25,244	3,260	6,958	21,265	26,994	40,647	433
1.00 and over.....	27	598	3,881	549	1,119	3,471	3,293	12,021	928
Undistributed <sup>2</sup> .....	76	2,099	18,581	112	198	547	( <sup>3</sup> )	89	932
1031.--LEAD AND ZINC ORES INDUSTRY									
Total.....	205	9,422	49,337	7,822	14,781	37,935	84,373	135,965	11,896
Less than 0.10.....	4	6	4	6	12	4	86	103	32
0.10 to 0.19.....	3	59	311	48	112	259	2,537	2,634	1,575
0.20 to 0.29.....	18	744	4,131	694	1,346	3,824	15,506	16,665	2,561
0.30 to 0.39.....	9	408	2,462	352	738	2,028	7,041	9,966	748
0.40 to 0.49.....	20	857	4,429	663	1,292	3,216	9,815	28,998	1,493
0.50 to 0.59.....	13	1,705	8,833	1,534	2,933	7,586	16,688	21,315	1,309
0.60 to 0.69.....	10	706	3,907	638	1,242	3,368	6,210	8,921	531
0.70 to 0.79.....	7	3,117	15,508	2,561	4,450	11,559	21,187	28,858	1,746
0.80 to 0.89.....	3	41	173	38	82	161	211	534	6
0.90 to 0.99.....	4	295	1,480	264	548	1,318	1,514	6,796	106
1.00 and over.....	31	1,037	4,958	902	1,804	4,028	3,451	10,527	1,219
Undistributed <sup>2</sup> .....	83	447	3,141	122	222	584	127	648	570
Lead ores subindustry, total.....	125	4,320	21,892	3,401	5,948	15,333	34,046	50,743	6,108
Less than 0.20.....	3	7	17	7	14	17	158	168	21
0.20 to 0.39.....	16	423	2,083	378	673	1,797	8,410	8,402	2,201
0.40 to 0.49.....	13	283	1,309	218	388	933	3,047	12,773	947
0.50 to 0.69.....	6	720	3,945	650	1,250	3,446	7,298	8,835	88
0.70 to 0.89.....	5	2,293	10,642	1,844	3,039	7,635	14,682	18,607	1,444
1.00 and over.....	16	268	1,457	227	471	1,148	368	1,503	1,093
Undistributed <sup>2</sup> .....	66	326	2,439	77	113	357	83	455	314
Zinc ores subindustry, total.....	80	5,102	27,445	4,421	8,833	22,602	50,327	85,222	5,788
Less than 0.20.....	4	58	298	47	110	246	2,405	2,569	1,586
0.20 to 0.39.....	11	729	4,510	668	1,411	4,055	14,137	18,229	1,108
0.40 to 0.49.....	7	574	3,120	445	904	2,283	6,768	16,225	546
0.50 to 0.69.....	17	1,691	8,795	1,522	2,925	7,508	15,600	21,401	1,752
0.70 to 0.89.....	5	865	5,039	755	1,493	4,085	6,716	10,785	308
0.90 to 0.99.....	4	295	1,480	264	548	1,318	1,514	6,796	106
1.00 and over.....	15	769	3,501	675	1,333	2,880	3,083	9,024	126
Undistributed <sup>2</sup> .....	17	121	702	45	109	227	44	193	256
West, total.....	141	4,793	26,647	4,163	8,224	21,940	42,330	69,014	5,841
Less than 0.20.....	4	8	18	8	16	18	185	193	32
0.20 to 0.29.....	12	476	2,871	463	945	2,802	10,063	10,034	2,234
0.30 to 0.39.....	3	84	635	81	195	614	1,662	2,248	434
0.40 to 0.49.....	11	172	907	137	296	678	2,116	11,792	535
0.50 to 0.59.....	7	885	5,043	816	1,583	4,559	9,428	11,348	431
0.60 to 0.69.....	3	401	2,368	368	732	2,083	3,788	5,470	238
0.70 to 0.79.....	3	1,647	9,047	1,429	2,807	7,261	11,924	20,553	423
0.80 to 0.89.....	2								
0.90 to 0.99.....	3								
1.00 and over.....	21								
Undistributed <sup>2</sup> .....	72	220	1,431	86	114	455	73	513	319
Lead ores subindustry, total.....	113	2,525	13,986	2,070	4,084	10,661	20,941	34,717	4,177
Less than 0.40.....	15	195	984	182	353	915	3,734	2,676	1,914
0.40 to 0.69.....	16	868	4,716	763	1,478	3,988	9,103	20,017	619
0.70 to 0.99.....	4	997	5,520	833	1,692	4,268	7,679	10,066	317
1.00 and over.....	16	268	1,457	227	471	1,148	368	1,503	1,093
Undistributed <sup>2</sup> .....	62	197	1,309	65	90	342	87	455	234
Zinc ores subindustry, total.....	28	2,268	12,661	2,093	4,140	11,279	21,389	34,297	1,664
Less than 0.40.....	4	373	2,540	370	803	2,519	8,176	9,799	786
0.40 to 0.69.....	5	590	3,602	558	1,133	3,332	6,229	8,593	585
0.70 to 0.99.....	4	650	3,527	596	1,115	2,993	4,245	10,487	106
1.00 and over.....	5	632	2,870	548	1,065	2,322	2,723	5,360	102
Undistributed <sup>2</sup> .....	10	23	122	21	24	113	16	58	85

See footnotes at end of table.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963—Continued

Industry, division, and ratio of payroll to value added in mining <sup>1</sup>	Establishments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expendi- tures
		Total	Payroll	Total	Man-hours	Wages			
	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
1042.--LODE GOLD INDUSTRY									
Total.....	201	2,397	13,861	2,091	4,544	11,422	21,312	26,632	2,859
Less than 0.30.....	8	111	746	97	217	620	2,611	2,952	212
0.30 to 0.59.....	5	49	332	46	89	315	758	919	112
0.60 to 0.79.....	4	1,770	10,133	1,558	3,413	8,609	16,426	20,343	581
0.80 to 0.99.....	7	150	930	143	327	860	1,122	2,145	221
1.00 and over.....	50	155	667	142	273	612	392	153	1,146
Undistributed <sup>2</sup> .....	127	162	1,053	105	225	406	3	120	587
Pacific, total.....	93	331	2,297	256	537	1,468	3,471	4,031	900
Less than 0.30.....	7	157	1,077	140	302	934	3,331	3,899	268
0.30 to 0.59.....	2								
0.80 to 0.99.....	1								
1.00 and over.....	19	73	336	64	119	287	136	65	245
Undistributed <sup>2</sup> .....	64	101	884	52	116	247	4	67	387
1043.--PLACER GOLD INDUSTRY									
Total.....	158	361	2,134	325	731	1,763	5,810	7,532	989
Less than 0.20.....	6	7	14	7	15	14	188	265	26
0.20 to 0.39.....	11	147	904	136	338	820	3,532	4,332	118
0.40 to 0.59.....	8	113	767	96	195	549	1,639	2,372	18
0.60 to 0.79.....	3	6	20	6	14	20	29	55	1
0.80 to 0.99.....	3	15	41	13	24	38	48	59	10
1.00 and over.....	16	53	277	48	106	214	236	203	319
Undistributed <sup>2</sup> .....	111	20	111	19	39	108	138	246	497
1044.--SILVER ORES INDUSTRY									
Total.....	107	1,458	8,802	1,169	2,330	6,834	21,904	26,060	3,338
0.10 to 0.19.....	1	367	2,390	329	688	2,160	11,702	13,162	281
0.20 to 0.29.....	3								
0.30 to 0.39.....	4								
0.40 to 0.49.....	2	103	474	85	167	394	1,328	1,234	505
0.50 to 0.59.....	5	707	4,284	605	1,160	3,468	7,781	10,573	1,120
0.60 to 0.69.....	3	60	357	48	97	297	567	746	114
0.80 to 0.89.....	1								
1.00 and over.....	17	92	433	60	119	348	336	34	698
Undistributed <sup>2</sup> .....	71	129	864	42	99	167	190	311	620
Mountain, total.....	94	1,406	8,519	1,150	2,307	6,783	21,707	25,978	3,066
Less than 0.30.....	4	367	2,390	329	688	2,160	11,702	13,162	281
0.30 and over.....	28	938	5,484	780	1,522	4,457	9,831	12,509	2,259
Undistributed <sup>2</sup> .....	62	101	645	41	97	166	174	307	526

<sup>1</sup>In computing these ratios, contract employment serving the establishment is excluded. The cost of contract work expressed as a percent of payroll for 1963 was for the Copper Ores Industry, 16.3 percent; for the Lead Ores Subindustry, 11.6 percent; for the Zinc Ores Subindustry, 3.9 percent; for the Lode Gold Industry, 6.7 percent; for the Placer Gold Industry, 15.9 percent; and for the Silver Ores Industry, 6.1 percent.

<sup>2</sup>Represents establishments with zero or negative value added; establishments with no employees; and for number of employees and payroll, includes figures for separately reported central offices and related facilities.

<sup>3</sup>Value added is not shown since the cost of supplies, minerals received for treatment, fuels, purchased electric energy, contract work, and purchased machinery installed exceeded the value of shipments and receipts and capital expenditures.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963

Value added per employee classes <sup>1</sup>	Number of employees	Number of establishments with average employment of--							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
1021.—COPPER ORES INDUSTRY									
Total.....	26,486	160	119	6	3	5	11	8	8
Less than \$3,000.....	288	30	28	1	-	1	-	-	-
\$3,000 to \$3,999.....	11	5	5	-	-	-	-	-	-
\$4,000 to \$4,999.....	257	7	5	-	1	1	-	-	-
\$5,000 to \$5,999.....	514	7	4	1	1	1	-	-	-
\$6,000 to \$6,999.....	2	2	-	1	-	-	1	-	-
\$7,000 to \$7,999.....	5,520	10	4	1	1	-	1	1	2
\$8,000 to \$8,999.....	811	5	3	-	-	-	2	-	-
\$9,000 to \$9,999.....	25	3	2	1	-	-	-	-	-
\$10,000 to \$12,499.....	2,745	3	-	-	-	-	1	2	-
\$12,500 to \$14,999.....	2	2	1	-	-	-	-	-	1
\$15,000 to \$17,499.....	4,834	5	1	-	-	1	1	-	2
\$17,500 to \$19,999.....	2,126	3	-	1	-	-	-	1	1
\$20,000 and over.....	7,319	15	3	-	-	1	5	4	2
Undistributed <sup>2</sup> .....	2,036	63	63	-	-	-	-	-	-
1031.—LEAD AND ZINC ORES INDUSTRY									
Lead ores subindustry.....	4,320	125	112	4	1	5	1	1	1
Less than \$3,000.....	294	29	27	1	-	1	-	-	-
\$3,000 to \$3,999.....	9	3	3	-	-	-	-	-	-
\$4,000 to \$4,999.....	20	7	7	-	-	-	-	-	-
\$5,000 to \$5,999.....	1,349	3	2	-	-	-	-	-	1
\$6,000 to \$6,999.....	1,004	1	-	1	-	-	-	-	-
\$7,000 to \$7,999.....	4	4	3	-	-	-	-	1	-
\$8,000 to \$8,999.....	337	1	1	-	-	-	-	-	-
\$9,000 to \$9,999.....	490	5	3	-	-	2	-	-	-
\$10,000 to \$12,499.....	2	6	4	1	-	-	1	-	-
\$12,500 to \$14,999.....	109	2	1	-	1	-	-	-	-
\$15,000 to \$17,499.....	165	3	3	-	-	-	-	-	-
\$17,500 to \$19,999.....	235	3	2	-	-	1	-	-	-
\$20,000 and over.....	308	3	2	-	-	1	-	-	-
Undistributed <sup>2</sup> .....	55	54	54	1	-	-	-	-	-
Zinc ores subindustry.....	5,102	80	47	12	5	7	8	1	-
Less than \$3,000.....	155	14	11	2	1	-	-	-	-
\$3,000 to \$3,999.....	635	1	1	-	-	-	-	-	-
\$4,000 to \$4,999.....	363	8	3	4	-	-	-	1	-
\$5,000 to \$5,999.....	132	5	1	1	1	2	-	-	-
\$6,000 to \$6,999.....	546	5	3	1	1	-	-	-	-
\$7,000 to \$7,999.....	1,065	5	2	-	-	1	1	-	-
\$8,000 to \$8,999.....	403	6	2	-	-	1	3	-	-
\$9,000 to \$9,999.....	571	5	3	-	-	2	-	-	-
\$10,000 to \$12,499.....	408	4	2	-	-	1	1	-	-
\$12,500 to \$14,999.....	296	6	2	2	1	-	1	-	-
\$15,000 to \$17,499.....	107	3	2	-	1	-	1	-	-
\$17,500 to \$19,999.....	338	3	2	1	-	-	1	-	-
\$20,000 and over.....	83	4	2	-	-	-	-	-	-
Undistributed <sup>2</sup> .....	11	11	11	-	-	-	-	-	-
1042.—LODE GOLD INDUSTRY									
Total.....	2,397	201	196	2	1	1	-	-	1
Less than \$3,000.....	220	76	75	1	-	-	-	-	-
\$3,000 to \$3,999.....	23	8	8	-	-	-	-	-	-
\$4,000 to \$4,999.....	21	8	8	-	-	-	-	-	-
\$5,000 to \$5,999.....	30	6	6	-	-	-	-	-	-
\$6,000 to \$6,999.....	10	3	3	-	-	-	-	-	-
\$7,000 to \$7,999.....	1,895	2	1	-	-	1	-	-	-
\$8,000 to \$8,999.....	1	1	1	-	-	-	-	-	-
\$9,000 to \$9,999.....	2	1	1	-	-	-	-	-	1
\$10,000 to \$12,499.....	1	1	1	-	-	-	-	-	-
\$15,000 to \$17,499.....	143	3	2	1	-	-	-	-	-
\$20,000 and over.....	55	2	1	-	1	-	-	-	-
Undistributed <sup>2</sup> .....	89	89	89	-	-	-	-	-	-
1043.—PLACER GOLD INDUSTRY									
Total.....	361	158	156	-	1	1	-	-	-
Less than \$3,000.....	45	19	19	-	-	-	-	-	-
\$3,000 to \$3,999.....	10	5	5	-	-	-	-	-	-
\$4,000 to \$4,999.....	22	4	4	-	-	-	-	-	-
\$5,000 to \$5,999.....	20	3	3	-	-	-	-	-	-
\$6,000 to \$6,999.....	21	2	2	-	-	-	-	-	-
\$7,000 to \$7,999.....	7	4	4	-	-	-	-	-	-
\$8,000 to \$8,999.....	1	1	1	-	-	-	-	-	-
\$9,000 to \$9,999.....	3	3	3	-	-	-	-	-	-
\$10,000 to \$12,499.....	1	1	1	-	-	-	-	-	-
\$12,500 to \$14,999.....	6	2	2	-	-	-	-	-	-
\$15,000 to \$17,499.....	1	1	1	-	-	-	-	-	-
\$17,500 to \$19,999.....	85	3	2	-	1	-	-	-	-
\$20,000 and over.....	139	6	5	-	-	1	-	-	-
Undistributed <sup>2</sup> .....	6	104	104	-	-	-	-	-	-

See footnotes at end of table.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963—Continued

Value added per employee classes <sup>1</sup>	Number of employees	Number of establishments with average employment of--							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 499 employees	1,000 employees and over
1044.—SILVER ORES INDUSTRY									
Total.....	1,458	107	99	2	2	3	1	-	-
less than \$3,000.....	83	24	24	-	-	-	-	-	-
\$3,000 to \$3,999.....	11	4	4	-	-	-	-	-	-
\$4,000 to \$4,999.....	55	2	1	1	-	-	-	-	-
\$5,000 to \$5,999.....		2	1	1	-	-	-	-	-
\$6,000 to \$6,999.....	28	1	1	-	-	-	-	-	-
\$7,000 to \$7,999.....		2	2	-	-	-	-	-	-
\$8,000 to \$8,999.....	536	1	1	-	-	-	-	-	-
\$9,000 to \$9,999.....		1	-	-	-	-	-	-	-
\$10,000 to \$12,499.....	4	2	-	-	1	-	1	-	-
\$12,500 to \$14,999.....	285	2	-	-	1	1	-	-	-
\$15,000 to \$17,499.....		2	2	-	-	-	-	-	-
\$17,500 to \$19,999.....	374	1	1	-	-	-	-	-	-
\$20,000 and over.....		2	-	-	-	2	-	-	-
Undistributed <sup>2</sup> .....	86	59	59	-	-	-	-	-	-

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>In computing these ratios, contract employment serving the establishment is excluded. The cost of contract work expressed as a percent of payroll for 1963 was for the Copper Ores Industry, 16.3 percent; for the Lead Ores Subindustry, 11.6 percent; for the Zinc Ores Subindustry, 3.9 percent; for the Lode Gold Industry, 6.7 percent; for the Placer Gold Industry, 15.9 percent; and for the Silver Ores Industry, 6.1 percent.

<sup>2</sup>Represents establishments with no employees or with negative value added in mining and, for number of employees, figures for separately reported central offices and related facilities.

TABLE 11. Hourly Earnings of Production, Development, and Exploration Workers for Establishments with 10 or More Employees, by Geographic Areas: 1963

Industry or subindustry by hourly earnings classes	Number of employees <sup>1</sup>	Number of establishments with 10 or more employees in—									
		Total	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
1021.—COPPER ORES INDUSTRY											
Total.....	24,314	51	-	-	7	1	-	-	-	40	3
Under \$1.00.....	242	{	1	-	-	-	-	-	-	1	-
\$1.00 to \$1.49.....			4	-	-	-	-	-	-	2	-
\$1.50 to \$1.99.....	1,627	{	13	-	-	4	1	-	-	2	-
\$2.00 to \$2.49.....			8	-	-	1	-	-	-	7	1
\$2.50 to \$2.99.....	5,932	{	17	-	-	-	-	-	-	7	-
\$3.00 to \$3.49.....			6	-	-	-	-	-	-	16	1
\$3.50 to \$3.99.....	11,019	{	2	-	-	-	-	-	-	5	1
\$4.00 and over.....			-	-	-	-	-	-	-	2	-
1031.—LEAD AND ZINC ORES INDUSTRY											
Total.....	3,945	21	-	-	-	4	-	-	2	15	-
Under \$1.00.....	103	{	2	-	-	-	-	-	1	1	-
\$1.00 to \$1.49.....			2	-	-	-	-	-	1	1	-
\$1.50 to \$1.99.....	3,758	{	11	-	-	-	-	-	-	2	-
\$2.00 to \$2.49.....			1	-	-	-	3	-	-	-	8
\$2.50 to \$2.99.....	84	{	1	-	-	-	-	-	-	1	-
\$3.00 to \$3.49.....			1	-	-	-	-	-	-	1	-
\$3.50 to \$3.99.....	4,934	{	2	-	-	-	1	-	-	1	-
\$4.00 and over.....			46	-	4	8	3	2	9	6	12
Production, development, or exploration	248	9	-	-	1	1	-	1	5	1	-
Management, development, or exploration	1,794	20	-	1	6	2	-	4	-	4	1
Other.....	2,132	13	-	3	1	-	2	4	-	3	1
Under \$1.00.....	760	{	3	-	-	-	-	-	-	3	-
\$1.00 to \$1.49.....			1	-	-	-	-	-	-	-	1
1042.—LODGE GOLD INDUSTRY											
Total.....	2,143	10	-	-	-	1	-	-	-	3	6
Under \$1.00.....	32	{	2	-	-	-	-	-	-	1	1
\$1.00 to \$1.49.....			1	-	-	-	-	-	-	-	1
\$1.50 to \$1.99.....	1,965	{	4	-	-	1	-	-	-	1	2
\$2.00 to \$2.49.....			1	-	-	-	-	-	-	-	1
\$2.50 to \$2.99.....	146	{	2	-	-	-	-	-	-	1	1
\$3.00 to \$3.49.....			-	-	-	-	-	-	-	-	-
1043.—PLACER GOLD INDUSTRY											
Total.....	241	5	-	-	-	-	-	-	-	-	5
Under \$1.00.....	241	{	1	-	-	-	-	-	-	-	1
\$1.00 to \$1.49.....			1	-	-	-	-	-	-	-	-
\$1.50 to \$1.99.....	241	{	1	-	-	-	-	-	-	-	1
\$2.00 to \$2.49.....			1	-	-	-	-	-	-	-	-
\$2.50 to \$2.99.....	241	{	1	-	-	-	-	-	-	-	1
\$3.00 to \$3.49.....			1	-	-	-	-	-	-	-	-
1044.—SILVER ORES INDUSTRY											
Total.....	1,345	14	-	-	-	-	-	-	-	13	1
Under \$1.00.....	585	{	1	-	-	-	-	-	-	1	-
\$1.00 to \$1.49.....			4	-	-	-	-	-	-	-	3
\$1.50 to \$1.99.....	760	{	1	-	-	-	-	-	-	1	-
\$2.00 to \$2.49.....			6	-	-	-	-	-	-	-	6
\$2.50 to \$2.99.....	760	{	1	-	-	-	-	-	-	1	-
\$3.00 to \$3.49.....			1	-	-	-	-	-	-	-	1
Production, development, or exploration	1	-	-	-	-	-	-	-	-	1	-
Management, development, or exploration	1	-	-	-	-	-	-	-	-	1	-

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

Includes figures for separately reported central offices and related facilities.

TABLE 12. Distribution of Operating Companies, by Employment Size and by Number of Establishments: 1963

Establishment count	Number of--		Number of establishments with average employment of--									
	Operating companies	Employees	Total	0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
1021—COPPER ORES INDUSTRY												
Total.....	118	124,519	160	92	17	10	6	3	5	11	8	8
Multiunit companies, total.....	19	23,809	61	10	7	8	3	2	5	10	8	8
1 establishment <sup>2</sup> .....	6	857	6	2	1	-	-	1	1	-	1	-
2 establishments.....	8	7,844	16	1	1	1	1	1	3	4	2	2
3 to 4 establishments.....	2		7	2	-	1	1	-	1	2	-	-
5 or 6 establishments.....	1	15,108	5	-	1	-	-	-	-	-	1	3
7 to 9 establishments.....	1		7	2	-	1	1	-	-	1	1	1
20 or more establishments.....	1		20	3	4	5	-	-	-	3	3	2
Single unit companies.....	99	710	99	82	10	2	3	1	-	1	-	-
1031—LEAD AND ZINC ORES INDUSTRY												
Lead ores subindustry.....	117	14,090	125	96	8	8	4	1	5	1	1	1
Multiunit companies, total.....	12	3,801	21	8	-	2	2	1	5	1	1	1
1 establishment <sup>2</sup> .....	8	1,554	8	3	-	1	-	-	3	-	1	-
2 establishments.....	1	2,247	2	-	-	-	-	1	-	1	-	-
3 or 4 establishments.....	2		6	1	-	-	2	-	2	-	-	1
5 or 6 establishments.....	1		5	4	-	1	-	-	-	-	-	-
Single unit companies.....	104	289	104	88	8	6	2	-	-	-	-	-
Zinc ores subindustry.....	50	15,036	80	25	9	13	12	5	7	8	1	-
Multiunit companies, total.....	14	4,788	44	3	3	8	9	5	7	8	1	-
1 establishment <sup>2</sup> .....	8	1,118	8	1	1	1	-	1	2	2	-	-
2 establishments.....	3	906	6	-	-	2	-	1	1	2	-	-
7 to 9 establishments.....	2	2,764	17	1	2	3	5	1	2	2	1	-
10 to 14 establishments.....	1		13	1	-	2	4	2	2	2	-	-
Single unit companies.....	36	248	36	22	6	5	3	-	-	-	-	-
1042—LODE GOLD INDUSTRY												
Total.....	199	2,397	201	176	15	5	2	1	1	-	-	1
Multiunit companies, total.....	6	1,933	8	5	1	-	-	-	1	-	-	1
1 establishment <sup>2</sup> .....	4	1,933	4	2	-	-	-	-	1	-	-	1
2 establishments.....	2		4	3	1	-	-	-	-	-	-	-
Single unit companies.....	193	464	193	171	14	5	2	1	-	-	-	-
1043—PLACER GOLD INDUSTRY												
Total.....	155	361	158	147	6	3	-	1	1	-	-	-
Multiunit companies, total.....	2	(D)	5	1	1	1	-	1	1	-	-	-
1 establishment <sup>1</sup> .....	1	(D)	1	-	-	-	-	-	1	-	-	-
3 or 4 establishments.....	1	(D)	4	1	1	1	-	1	-	-	-	-
Single unit companies.....	153	(D)	153	146	5	2	-	-	-	-	-	-
1044—SILVER ORES INDUSTRY												
Total.....	105	1,458	107	87	6	6	2	2	3	1	-	-
Multiunit companies, total.....	9	1,206	11	3	1	1	1	1	3	1	-	-
1 establishment <sup>1</sup> .....	7	1,206	7	3	-	1	1	-	2	-	-	-
2 establishments.....	2		4	-	1	-	-	1	1	1	-	-
Single unit companies.....	96	252	96	84	5	5	1	1	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosure. (NA) Not available. (X) Not applicable.  
<sup>1</sup>Excludes figures for separately reported central offices and related facilities.  
<sup>2</sup>Represents companies having at least one establishment classified in other industries or subindustries.

## BAUXITE AND FERROALLOY ORES, EXCEPT VANADIUM

This report shows 1963 Census of Mineral Industries statistics for establishments classified in Industry Groups 105, Bauxite and Other Aluminum Ores, and 106, Ferroalloy Ores, Except Vanadium. The separate industries included in these groups are as follows:

### SIC Code and Title

- 1051—Bauxite and Other Aluminum Ores
- 1062—Manganese Ores
- 1064—Tungsten Ores
- 1069—Ferroalloy Ores, Except Vanadium, Not Elsewhere Classified

### INDUSTRY DESCRIPTIONS

Industry 1051—Bauxite and Other Aluminum Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing bauxite and other aluminum ores. (Bauxite was the only aluminum ore produced commercially in 1963.) Associated activities such as drying, calcining, activating, and sintering are also included.

Industry 1062—Manganese Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing manganese ores, such as pyrolusite, rhodochrosite, psilomelane, and manganite. The mining of manganiferous iron ores valued chiefly for their iron content is classified in industry 1011.

Industry 1064—Tungsten Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing tungsten ores, such as ferberite, huebnerite, scheelite, and wolframite.

Industry 1069—Ferroalloy Ores, Except Vanadium, Not Elsewhere Classified. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing ferroalloy ores, n.e.c., such as chromite, columbite, and nickel ore. Titanium ore, used sometimes for ferroalloying but principally for other purposes, is classified in industry 1093.

Separate statistics could not be published for 1963 for industries 1064 and 1069. Hence, combined 1963 totals are shown for these two industries throughout this report.

The total value of shipments and receipts of the Bauxite Industry in 1963 was \$21 million, of which over 98 percent represented primary products. The total value of shipments and receipts of the Ferroalloy Ores, Except Vanadium, Industry Group was \$91 million, of which primary products of these industries amounted to about \$89 million. Of the total value of shipments for the latter group, the Manganese Ores Industry accounted for about \$7 million; and the Tungsten Ores and the Ferroalloy Ores, Except Vanadium, N.E.C. Industries for about \$83 million.

These figures represent gross value of shipments and receipts and some of them contain duplication due to the inclusion of the value of minerals transferred from one establishment to other establishments in the same industry for treatment. In order to eliminate this duplication, the following figures were derived by subtraction from gross shipments



either the value of shipments of ores to treatment plants or, if the latter figure was not available, the cost of minerals received from other establishments for treatment. Thus, for the Bauxite Industry, the cost of minerals received from other establishments for treatment was \$1.5 million, yielding a value of net shipments of \$20 million. For the Manganese Ores Industry, the cost of minerals received for treatment was \$4 million, yielding a net shipment value of \$3 million. For the Tungsten Ores and Ferroalloy Ores, N.E.C., Industries, the cost of minerals received for treatment was \$3 million, yielding a value of net shipments of \$81 million. Separate figures for gross and net shipments are shown in tables 1 and 3 of this report.

The production index for the primary products of the Bauxite Industry increased to 84 in 1963 from the 1958 level of 80. The unit value index for bauxite in 1963 was 153 compared to 135 in 1958. Both indexes were computed on a basis of 1954 = 100. For primary products of the Ferroalloy Ores Industries in 1963 the production index was 81, an increase from 74 in 1958; the corresponding unit value indexes were 98 and 93, respectively. For manganese ores only, the production index for 1963 was 20, a decrease from 138 in 1958. The manganese ores unit value indexes were 110 for 1963 and 104 for 1958.

The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the production of secondary products, and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7 to 12) with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5 which shows the value of primary and secondary products shipped by establishments classified in the specified industry and also the value of net shipments of primary products of the industry produced as secondary products by establishments classified in other industries.

#### BUREAU OF CENSUS AND BUREAU OF MINES COMPARISONS

The Bureau of the Census statistics on primary products of the Bauxite and Ferroalloy Ores, Except Vanadium, Industries are, in general, comparable with statistics for similar products published by the Bureau of Mines. Differences in the statistics result primarily from differences in data collection methods, coverage, and objectives sought. The most closely comparable statistics from the two bureaus are shown in the table below. Major reasons for the differences in product statistics are as follows:

The Bureau of the Census excludes small establishments whose value of products and reported costs were less than \$500. The Bureau of Mines includes all establishments regardless of size. However, the contribution to products of such establishments is usually small.

The Bureau of the Census obtains information on total production and shipments of crude ore and treated minerals from each establishment, including shipments of ores to treatment plants, usually in the same mining industry. The Bureau of the Census also calculates net shipments in order to provide a measure of the product leaving the particular mining industry. In general, the Bureau of Mines presents statistics on products as marketable shipments to consumers.

The Bureau of the Census classifies ores on the basis of the metal of major total value contained in the ores or concentrates produced and shipped, frequently obtaining only the total tonnage of ores mined. The Bureau of Mines sometimes obtains more detailed product statistics. For instance, the Bureau of the Census excludes from its statistics on manganese ores and concentrates (and includes as iron ores) those classified as manganese iron ores valued chiefly for their iron content. The latter ores and concentrates

are included in the Bureau of Mines products statistics on manganiferous ores (5 to 35 percent Mn).

The Bureau of the Census includes in its product statistics minerals concentrated, otherwise treated, or sized from imported ores as well as those from domestic ores. The Bureau of Mines statistics represent production and shipments of domestic ores only. This accounts, in part, for the differences shown for manganese ores.

The Bureau of the Census statistics on value represent reported values f.o.b. mine or plant. In some instances the Bureau of Mines estimates value for a portion of the product on the basis of unit market values obtained from other sources. This explains some of the differences for bauxite.

Differences exist in establishment coverage in certain areas for the two collecting agencies.

# QUANTITY AND VALUE OF MINERAL PRODUCTS AS REPORTED TO THE BUREAU OF THE CENSUS AND TO THE BUREAU OF MINES: 1963

Product	Bureau of the Census statistics			Bureau of Mines statistics		
	Production (1,000 long tons)	Shipments including interplant transfers		Production (1,000 long tons)	Shipments	
		Quantity (1,000 long tons)	Value (\$1,000)		Quantity (1,000 long tons)	Value (\$1,000)
Bauxite:						
Crude bauxite.....	1,863	(D)	(D)	1,831	(NA)	(NA)
Net shipments.....	(X)	<sup>1</sup> 1,789	<sup>1</sup> 20,478	(X)	1,779	18,290
Manganese ores.....	<sup>2</sup> 55	<sup>3</sup> 89	<sup>3</sup> 6,752	(NA)	<sup>4</sup> 48	(NA)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing data for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Represents gross shipments less receipts from other establishments for treatment.

<sup>2</sup>Represents crude ores.

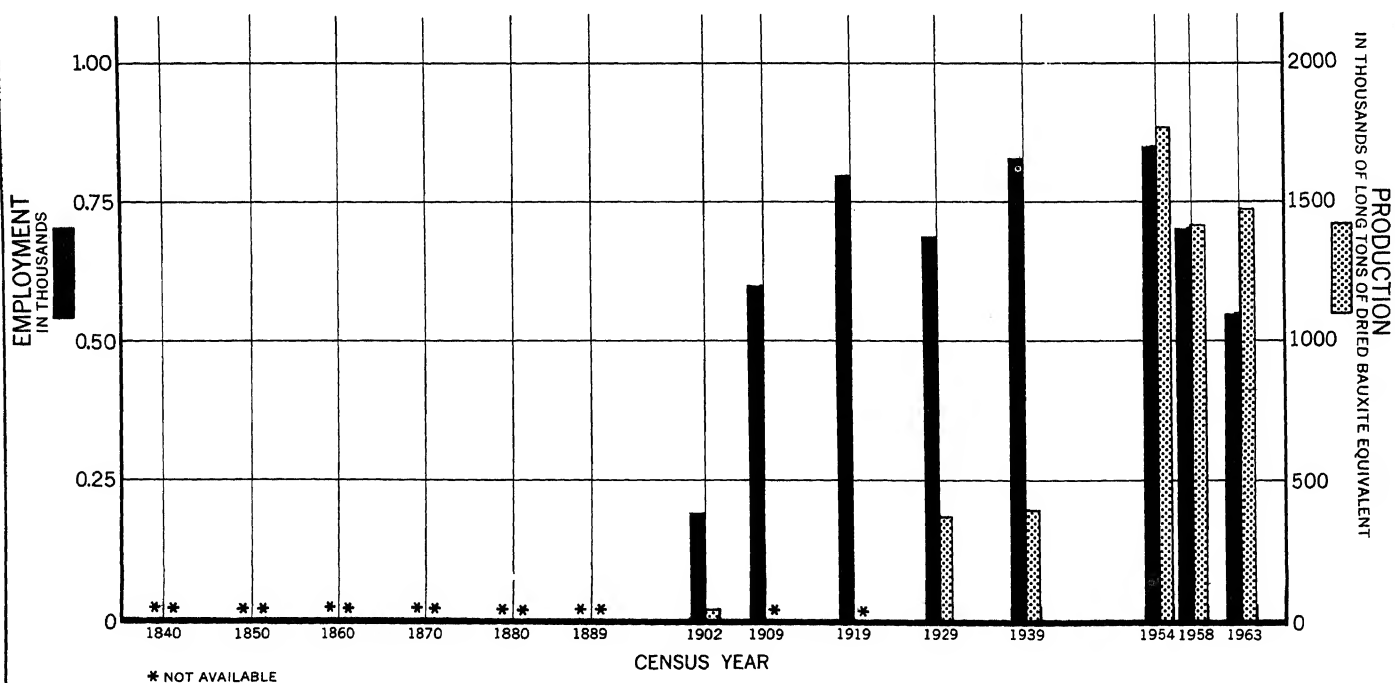
<sup>3</sup>Represents treated manganese ores, nodules, and sinter produced at domestic treatment plants whether from domestic or foreign ores.

<sup>4</sup>Represents manganese ore (35 percent or more manganese) and ferruginous manganese ore, except in Minnesota. These shipments represent marketable ores for the consumer. Besides direct-shipping ore, they include without duplication concentrates and nodules made from domestic ores.

# Distribution of Employment by State: 1963



## Employment and Production: 1840-1963



# FERROALLOY ORES, EXCEPT VANADIUM

Distribution of Employment by State: 1963



Employment: 1840-1963

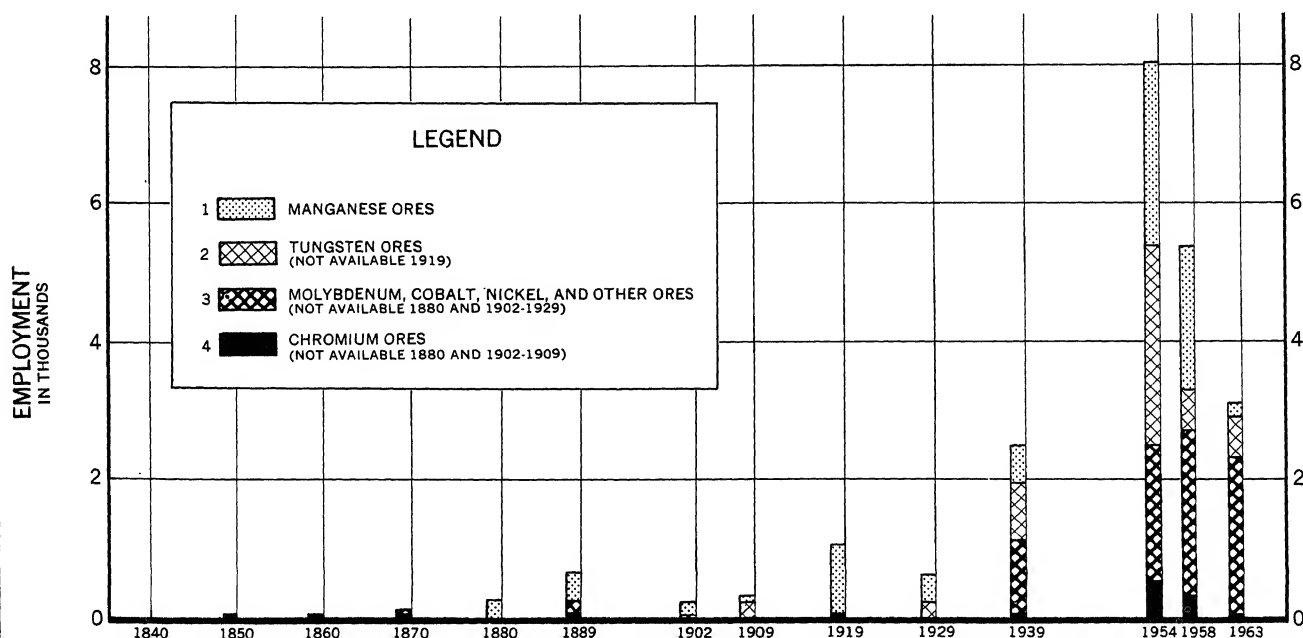


TABLE 1. General Statistics: 1963 and Earlier Years

Year	Operating companies  (number)	Establishments		All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Selected expenses				Value of shipments and receipts (\$1,000)	Value of net ship- ments and receipts <sup>1</sup> (\$1,000)	Quantity of net shipments of primary products <sup>2</sup> (1,000 tons)	Capital expend- itures (\$1,000)	Horse- power rating of power equip- ment (1,000)
		Total (number)	With 20 employ- ees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)		Supplies, fuels, and purchased electric energy (\$1,000)	Minerals received for treat- ment (\$1,000)	Con- tract work (\$1,000)	Cost of purchased machin- ery in- stalled (\$1,000)					
INDUSTRY 1051.—BAUXITE																		
1963.....	10	17	4	552	3,442	414	751	2,285	17,464	1,132	1,474	1,228	462	21,491	20,478	1,478	269	29
1958.....	12	29	9	705	3,606	502	905	2,290	15,430	1,158	1,066	445	1,483	18,174	17,374	1,420	1,408	(NA)
1954.....	12	25	6	852	3,581	661	1,288	2,529	12,827	1,162	1,181	1,603	356	16,819	16,029	1,766	310	49
1939 <sup>3</sup> .....	10	16	(NA)	827	819	727	1,176	578	1,965	516	(NA)	46	(NA)	(NA)	2,527	388	(NA)	13
1935.....	(NA)	411	(NA)	5636	5461	559	(NA)	330	1,188	357	(NA)	(NA)	(NA)	(NA)	1,545	(NA)	(NA)	(NA)
1929.....	(NA)	9	(NA)	689	790	602	(NA)	513	1,781	376	(NA)	82	96	(NA)	2,239	365	(NA)	6
1919.....	(NA)	10	(NA)	804	1,099	738	(NA)	942	1,748	442	-	-	(NA)	2,190	2,190	(NA)	(NA)	3
1909.....	10	10	(NA)	598	230	563	(NA)	198	615	56	-	-	(NA)	671	671	(NA)	(NA)	2
1902.....	7	438	(NA)	192	93	6150	(NA)	60	87	40	(NA)	1	(NA)	(NA)	128	29	(NA)	1
GROUP 106.—FERROALLOY ORES																		
1963.....	48	58	11	3,102	20,365	2,627	4,867	15,231	66,407	18,008	6,985	3,682	1,453	90,704	83,719	(X)	5,831	157
1958.....	286	294	33	5,438	26,711	4,380	8,335	19,455	74,255	19,751	15,370	6,532	2,158	111,521	106,435	(X)	6,545	(NA)
1954.....	972	1,086	51	8,078	38,535	6,838	15,122	31,330	107,399	27,765	16,734	8,817	8,475	153,671	136,937	(X)	15,519	368
1939.....	(NA)	4103	(NA)	2,493	3,995	2,168	4,686	3,096	16,404	3,255	(NA)	98	(NA)	(NA)	19,757	(X)	(NA)	56
INDUSTRY 1062.—MANGANESE ORES																		
1963.....	16	17	5	224	1,138	180	351	820	2,348	556	4,424	105	181	7,228	2,804	255	386	20
1958.....	182	186	22	2,099	9,036	1,792	3,475	7,244	20,014	6,994	10,675	2,807	1,085	39,385	34,330	7460	2,190	(NA)
1954.....	319	367	24	2,604	9,292	2,266	4,293	7,643	18,118	6,285	5,382	3,573	2,304	32,398	27,016	455	3,264	106
1939 <sup>6</sup> .....	26	434	(NA)	545	566	504	959	483	707	238	(NA)	-	(NA)	945	48	48	(NA)	5
1929 <sup>8</sup> .....	(NA)	19	(NA)	389	480	354	(NA)	392	967	211	(NA)	6	12	(NA)	1,184	41	(NA)	2
1919 <sup>8</sup> .....	(NA)	35	(NA)	997	1,220	909	(NA)	1,086	1,493	546	-	149	(NA)	2,188	2,188	(NA)	(NA)	6
1909.....	10	10	(NA)	95	34	88	(NA)	27	22	9	-	-	(NA)	31	31	(NA)	(NA)	(Z)
1902 <sup>8</sup> .....	19	419	(NA)	212	84	6194	(NA)	75	160	18	(NA)	-	(NA)	(NA)	178	16	(NA)	(Z)
1889.....	(NA)	(NA)	(NA)	432	124	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	241	24	(NA)	(NA)
1880.....	(NA)	46	(NA)	232	47	9222	(NA)	(NA)	87	16	(NA)	(NA)	(NA)	(NA)	103	11	(NA)	(Z)
INDUSTRIES 1064 AND 1069.—TUNGSTEN ORES AND FERROALLOY ORES, N.E.C.																		
1963.....	33	41	6	2,878	19,227	2,447	4,516	14,411	64,059	17,452	2,561	3,577	1,272	83,476	80,915	(X)	5,445	137
1958.....	(NA)	108	11	3,339	17,675	2,588	4,860	12,211	54,241	12,757	4,695	3,725	1,073	72,136	72,105	(X)	4,355	(NA)
1954.....	(NA)	719	27	5,474	29,243	4,572	10,829	23,687	89,281	21,480	11,352	5,244	6,171	121,273	109,921	(X)	12,255	263
1939.....	(NA)	469	(NA)	1,948	3,428	1,664	3,727	2,613	15,698	3,016	(NA)	98	(NA)	(NA)	18,812	(X)	(NA)	51
INDUSTRY 1064.—TUNGSTEN ORES																		
1958.....	32	32	4	638	2,907	508	977	1,993	8,164	1,619	4,664	7	98	14,430	10,430	76	122	(NA)
1954.....	500	549	20	2,987	14,758	2,635	6,327	13,148	40,744	9,981	10,891	1,885	3,562	60,737	49,846	53	6,326	156
1939.....	39	453	(NA)	844	1,368	701	1,639	1,114	2,427	872	(NA)	55	(NA)	(NA)	3,354	3	(NA)	15
1929 <sup>11</sup> .....	(NA)	12	(NA)	217	358	186	(NA)	297	540	190	(NA)	4	14	(NA)	734	1	(NA)	3
1909.....	34	34	(NA)	207	270	181	(NA)	221	412	110	-	41	(NA)	563	563	(NA)	(NA)	1
1902.....	4	44	(NA)	2	1	62	(NA)	1	6	-	(NA)	-	(NA)	(NA)	6	(Z)	(NA)	(Z)
INDUSTRY 1069.—FERROALLOY ORES, N.E.C.																		
1958, total.....	75	76	7	2,701	14,768	2,080	3,883	10,218	46,077	11,138	31	3,718	975	57,706	57,675	(X)	4,233	(NA)
Chromium ores subindustry.....	63	63	1	296	1,646	235	488	1,122	5,759	470	31	289	188	6,001	5,970	148	736	(NA)
Molybdenum, cobalt, and other ores subindustry.....	12	13	6	2,405	13,122	1,845	3,395	9,096	40,318	10,668	-	3,429	787	51,705	51,705	(X)	3,497	(NA)
1954, total.....	155	170	7	2,487	14,485	1,937	4,502	10,539	48,537	11,499	461	3,359	2,609	60,536	60,075	(X)	5,929	107
Chromium ores subindustry.....	143	158	2	525	2,613	454	1,015	2,216	5,617	1,387	461	436	331	7,398	6,937	12154	834	27
Molybdenum, cobalt, and other ores subindustry.....	12	12	5	1,962	11,872	1,483	3,487	8,323	42,920	10,112	-	2,923	2,278	53,138	53,138	(X)	5,095	79
1939, total.....	17	416	(NA)	1,104	2,060	963	2,088	1,499	13,271	2,144	(NA)	43	(NA)	(NA)	15,458	(X)	(NA)	36
Chromium ores subindustry <sup>13</sup> .....	3	42	(NA)	39	54	31	59	42	27	20	(NA)	-	(NA)	(NA)	47	4	(NA)	1
Molybdenum, cobalt, and other ores subindustry.....	14	414	(NA)	1,065	2,006	932	2,029	1,457	13,244	2,124	(NA)	43	(NA)	(NA)	15,411	(X)	(NA)	35
1919 (chromium ores subindustry only).....	(NA)	15	(NA)	36	50	31	(NA)	45	67	15	-	24	(NA)	106	106	(NA)	(NA)	(Z)

See footnotes at end of table.

TABLE 1. General Statistics: 1963 and Earlier Years—Continued

Year	Operating companies	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses				Value of shipments and receipts	Value of net ship- ments and receipts <sup>1</sup>	Quantity of net ship- ments of primary products <sup>2</sup>	Capital expend- itures	Horse- power rating of power equip- ment
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages		Supplies, fuels, and purchased electric energy	Minerals received for treat- ment	Contract work	Cost of purchased machinery in- stalled					
(number)	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 tons)	(\$1,000)	(1,000)		
	INDUSTRY 1069.—FERROALLOY ORES, N.E.C.—Continued																	
1889, total.....	(NA)	(NA)	(NA)	217	100	<sup>9</sup> 211	(NA)	90	35	33	(NA)	2	(NA)	(NA)	70	(X)	(NA)	(NA)
Chromium ores subindustry.....	(NA)	46	(NA)	30	6	<sup>9</sup> 30	(NA)	6	26	4	(NA)	-	(NA)	(NA)	30	2	(NA)	(NA)
Molybdenum, cobalt, and other ores subindustry.....	(NA)	(NA)	(NA)	187	94	<sup>9</sup> 181	(NA)	84	9	29	(NA)	2	(NA)	(NA)	40	(X)	(NA)	(NA)
1870 <sup>14</sup> .....	(NA)	5	(NA)	95	16	(NA)	(NA)	(NA)	40	8	(NA)	(NA)	(NA)	(NA)	48	(NA)	(NA)	(Z)
1850 (chromium ores subindustry only).....	(NA)	4	(NA)	47	10	(NA)	(NA)	(NA)	18	6	(NA)	(NA)	(NA)	(NA)	24	(NA)	(NA)	(NA)

Note: For an explanation of column captions see appendix A. For more detailed historical statistics for these industries see table 1 of the corresponding chapter of the 1954 Census of Mineral Industries, Vol. 1.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. (Z) Less than one-half of the unit of measure specified.

<sup>1</sup>For the Bauxite Industry in 1963 represents net shipments of primary products only. For the Bauxite Industry in 1958 and 1954, and for the Manganese Ores Industry and the Tungsten Ores Industry in 1963 and 1958, represents gross shipments and receipts less shipments to treatment plants; for all other industries and subindustries in 1958 and 1954 represents gross shipments and receipts less cost of minerals received from other establishments for treatment. In general, also excludes the value of minerals purchased for resale without further processing. For 1939 and earlier years represents value of net production and receipts.

<sup>2</sup>For bauxite in 1963, 1958, and 1954, and for manganese ores and tungsten ores in 1958, represents gross shipments less shipments to treatment plants; for all other products in 1958 and 1954 represents gross shipments less tonnage of minerals received from other establishments for treatment. For manganese ores in 1963, represents production of crude manganese ores. For bauxite and manganese ores, represents long tons; for tungsten ores and chromium ores, represents short tons. For bauxite, represents dried bauxite equivalent.

<sup>3</sup>Excludes statistics for two nonproducing mines. Figures for these bauxite operations were combined in 1939 with the figures for two nonproducing manganese ores mines and one chrome mine. For the five nonproducing operations combined, employment averaged 21 for that year and principal expenses amounted to \$66 thousand.

<sup>4</sup>Represents number of mines.

<sup>5</sup>Excludes figures for employees at central offices maintained independently of mine offices.

<sup>6</sup>Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.

<sup>7</sup>Includes shipments by establishments classified in other industries.

<sup>8</sup>Excludes nonproducing operations for which separate figures are not available, as follows: 1939, 2 mines; 1929, 3 establishments; 1919, 2 establishments; and 1902, 3 mines. It is not clear whether data for nonproducing operations in years prior to 1902 were included in the statistics shown for those years.

<sup>9</sup>Represents the average number employed during the time the mines were active.

<sup>10</sup>All primary products of the Tungsten Ores Industry shipped by establishments classified in that industry were shipped in the form of concentrates. It is presumed that most of the tungsten ores received by plants in the industry for concentration were imported.

<sup>11</sup>Excludes 10 nonproducing establishments for which separate figures are not available.

<sup>12</sup>Includes a small quantity of chromium concentrates shipped by establishments not classified in the Chromium Ores Subindustry.

<sup>13</sup>Excludes data for one nonproducing chromium ores mine. Except for number of operating companies, number of mines, and quantity of product, includes data for one antimony mine.

<sup>14</sup>For 1860, only one establishment was reported in the Chromium Ores Subindustry.

TABLE 2. General Statistics by Geographic Areas and Type of Operation: 1963 and 1958

Industry code, industry, geographic area, and type of operation <sup>1</sup>	1963										1958			
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of net shipments of primary products <sup>2</sup>	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 long tons)	(\$1,000)	(number)	\$1,000
1051.—BAUXITE, TOTAL.....	17	4	552	3,442	414	751	2,285	17,464	4,296	21,491	1,478	269	705	15,430
GEOGRAPHIC AREAS														
West South Central (Arkansas).....	8	4	489	3,151	368	671	2,101	16,725	3,615	20,147	1,478	{	193	632
Other regions.....	9	-	63	291	46	80	184	739	681	1,344				
TYPE OF OPERATION														
Mines only <sup>3</sup> .....	10	2	456	2,923	341	608	1,921	16,210	2,325	18,382	1,478	{	153	566
Mines with treatment plants and treatment plants only.....	7	2	96	519	73	143	364	1,254	1,971	3,109				
1062.—MANGANESE ORES.....	17	5	224	1,138	180	351	820	2,348	5,266	7,228	55	386	2,099	20,014
1064 and 1069.—TUNGSTEN ORES AND FERROALLOY ORES, N.E.C....	41	6	2,878	19,227	2,447	4,516	14,411	64,059	24,862	83,476	(X)	5,445	3,339	54,241

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>General statistics for some States are not shown separately in this table in order to avoid disclosing figures for individual companies or because of the relatively small size of the statistics. Such States are shown below for 1963, with the number of establishments in each State (and in parentheses the number of employees or employment size range): SIC 1051, Bauxite: Georgia, 5 (18) and Alabama, 4 (45). SIC 1062, Manganese Ores: Pennsylvania, 1 (50-99); Virginia, 1 (20-49); Arkansas, 3 (0-4); Texas, 2 (20-49); Montana, 4 (56); Colorado, 1 (0-4); New Mexico, 2 (20-49); Arizona, 1 (0-4); California, 2 (20-49). SIC 1064 and 1069: New York, 1 (100-249); North Carolina, 1 (50-99); Texas, 1 (0-4); Montana, 4 (12); Idaho, 2 (0-4); Wyoming, 2 (5-9); Colorado, 7 (2,120); New Mexico, 2 (20-49); Arizona, 4 (3); Utah, 1 (0-4); Nevada, 3 (10-19); Oregon, 1 (50-99); California, 12 (401).

<sup>2</sup>For bauxite represents gross shipments less shipments to treatment plants in dried bauxite equivalent; for manganese ores, represents production of crude manganese ores.

<sup>3</sup>Includes data for one nonproducing mine.

TABLE 3. Detailed Statistics for Selected Geographic Areas and Type of Operation: 1963

Item	1051.-Bauxite			106.- Ferroalloy ores	1062.- Manganese ores	1064 and 1069.- Tungsten ores and ferroalloy ores, n.e.c.
	United States, all operations	West South Central (Arkansas)	Mines only <sup>1</sup>			
Establishments, total.....number..	17	8	10	58	17	41
With 0 to 19 employees.....do....	13	4	8	47	12	35
With 20 to 99 employees.....do....	2	2	-	8	5	3
With 100 employees and over.....do....	2	2	2	3	-	3
Including mines.....do....	11	4	10	50	11	39
Including treatment plants.....do....	7	4	-	17	8	9
Net shipments of primary products <sup>2</sup> .....1,000 long tons..	1,478	(D)	(D)	(X)	55	(X)
Value of shipments and receipts.....\$1,000..	21,491	20,147	18,382	90,704	7,228	83,476
Minerals transferred to other establishments for treatment and purchases for resale.....do....	21,491	20,147	(D)	<sup>3</sup> 6,985	<sup>3</sup> 4,424	2,561
Net shipments and receipts, total.....do....	20,478	(D)	<sup>4</sup> 18,382	<sup>5</sup> 83,719	<sup>5</sup> 2,804	80,915
Primary products.....do....	(D)	-	18,382	<sup>5</sup> 83,719	<sup>5</sup> 2,804	80,915
Secondary products.....do....	17,464	16,725	16,210	66,407	2,348	64,059
Value added in mining.....do....	558	491	459	3,121	228	2,893
Persons in industry, total.....number..	414	368	341	2,627	<sup>6</sup> 180	2,447
Production, development, and exploration workers (average for the year).....do....	409	359	333	2,673	171	2,502
March.....do....	400	358	332	2,515	178	2,337
May.....do....	428	378	350	2,526	182	2,344
August.....do....	418	376	348	2,531	180	2,351
November.....do....	138	121	115	475	44	431
Other employees.....do....	6	2	3	19	4	15
Proprietors and firm members.....do....	6	2	3	17	3	14
Performing manual labor.....do....	751	671	605	4,867	351	4,516
Man-hours worked by production, development, and exploration workers, total.....1,000..	605	560	605	3,411	154	3,257
At mines, total.....do....	197	197	197	2,710	38	2,672
Underground.....do....	144	99	144	272	108	164
Open-pit.....do....	264	264	264	429	8	421
Surface.....do....	146	111	-	1,456	197	1,259
At treatment plants.....do....	7	-	4	351	18	333
Man-hours spent on development and exploration work (included above).....do....	7,276	6,370	4,874	49,040	6,223	42,817
Principal expenses designated below, total.....\$1,000..	2,285	2,101	1,922	15,231	820	14,411
Wages of production, development, and exploration workers.....do....	1,157	1,050	1,002	51,340	318	4,816
Salaries of all other employees.....do....	1,474	1,680	-	6,985	4,424	2,561
Minerals received for treatment.....do....	660	-	522	15,374	398	14,976
Supplies.....do....	287	216	104	522	66	456
Purchased fuel.....do....	185	161	132	2,112	92	2,020
Purchased electric energy.....do....	1,228	1,162	1,228	3,682	105	3,577
Contract work.....do....	462	396	381	1,453	181	1,272
Purchased machinery installed.....do....	269	193	155	5,831	386	5,445
Capital expenditures, total.....do....	30	28	30	2,363	71	2,292
Development and exploration of mineral property.....do....	43	4	9	1,258	38	1,220
Treatment plant and other construction.....do....	196	161	116	2,082	234	1,848
New machinery and equipment.....do....	-	-	-	128	43	85
Used plant and equipment.....do....	234	195	38	541	22	519
Energy used.....million kwh. equivalent..	-	-	-	(Z)	(Z)	-
Coal.....1,000 short tons..	5	4	5	19	(Z)	19
Distillate fuel oil.....1,000 barrels..	3	-	-	42	3	39
Residual fuel oil.....do....	620	531	16	545	13	532
Gas.....million cu. ft..	332	315	318	226	96	130
Gasoline.....1,000 gallons..	16	16	16	19	14	5
Other fuels and undistributed <sup>7</sup> .....\$1,000..	12	10	8	251	6	245
Electric energy purchased.....million kwh..	-	-	-	-	-	-
Electric energy generated and used.....do....	29	25	24	157	20	137
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....do....	70	68	70	60	111	56
Per production worker.....do....	19	17	17	45	12	33
Prime movers.....do....	10	8	7	112	8	104
Electric motors driven by purchased energy.....do....	-	-	-	-	-	-
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	-	-	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

(2) Less than one-half of the unit of measure specified.

<sup>1</sup>Includes data for one nonproducing mine.<sup>2</sup>For bauxite, represents gross shipments less shipments to treatment plants in dried bauxite equivalent; for manganese ores, represents production of crude manganese ores.<sup>3</sup>Represents only cost of minerals received for treatment.<sup>4</sup>For this type of operation shown as the same as total value of shipments and receipts, since minerals for treatment are transferred to other types of operation.<sup>5</sup>Represents value of shipments and receipts less the cost of minerals received for treatment. Includes the value of purchases for resale.<sup>6</sup>Figures for number of production, development, and exploration workers for all months were collected for this industry. The totals for the United States for the months not shown above are: January, 175; February, 162; April, 182; June, 173; July, 178; September, 184; October, 181; and December, 180.<sup>7</sup>The undistributed fuels cost was for Bauxite, \$4 thousand; for Manganese Ores, \$6 thousand; and for Tungsten Ores and Ferroalloy Ores, N.E.C., \$15 thousand.

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
INDUSTRY 1051.—BAUXITE											
Establishments.....number..	17	6	3	4	2	-	1	1	-	-	-
All employees:											
Total.....do....	552	8	24	55	465	-	(D)	(D)	-	-	-
Payroll.....\$1,000..	3,442	138	(D)	3,304	(D)	-	(D)	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	414	25	(D)	45	344	-	(D)	(D)	-	-	-
Man-hours.....1,000..	751	45	(D)	706	(D)	-	(D)	(D)	-	-	-
Wages.....\$1,000..	2,285	108	(D)	2,177	(D)	-	(D)	(D)	-	-	-
Value added in mining.....do....	17,464	845	(D)	16,619	(D)	-	(D)	(D)	-	-	-
Value of shipments and receipts.....do....	21,491	1,343	(D)	20,148	(D)	-	(D)	(D)	-	-	-
Capital expenditures.....do....	269	4	(D)	265	(D)	-	(D)	(D)	-	-	-
Producing establishments by type of operation, total.....number..	16	5	3	4	2	-	1	1	-	-	-
Mines only:											
Open-pit.....do....	7	3	2	1	-	-	1	-	-	-	-
Combination open-pit and underground.....do....	1	-	-	-	-	-	-	-	-	-	-
Underground.....do....	1	1	-	-	-	-	-	1	-	-	-
Mines with treatment plants:											
Open-pit.....do....	1	-	1	-	-	-	-	-	-	-	-
Treatment plants only.....do....	6	1	-	3	2	-	-	-	-	-	-
INDUSTRY 1062.—MANGANESE ORES											
Establishments.....number..	17	8	2	2	4	1	-	-	-	-	-
All employees:											
Total.....do....	224	14	99	(D)	111	(D)	-	-	-	-	-
Payroll.....\$1,000..	1,138	47	523	(D)	568	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	180	11	83	(D)	86	(D)	-	-	-	-	-
Man-hours.....1,000..	351	18	148	(D)	185	(D)	-	-	-	-	-
Wages.....\$1,000..	820	35	405	(D)	380	(D)	-	-	-	-	-
Value added in mining.....do....	2,348	4	1,140	(D)	1,204	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	7,228	159	4,580	(D)	2,489	(D)	-	-	-	-	-
Capital expenditures.....do....	386	26	176	(D)	184	(D)	-	-	-	-	-
Producing establishments by type of operation, total.....number..	8	1	2	1	3	1	-	-	-	-	-
Mines only:											
Open-pit.....do....	2	1	-	-	1	-	-	-	-	-	-
Mines with treatment plants:											
Underground.....do....	1	-	-	-	1	-	-	-	-	-	-
Treatment plants only.....do....	5	-	2	1	1	1	-	-	-	-	-
INDUSTRIES 1064 and 1069.—TUNGSTEN ORES AND FERROALLOY ORES, N.E.C.											
Establishments.....number..	41	28	4	3	-	3	1	1	-	1	-
All employees:											
Total.....do....	2,878	34	2,844	(D)	-	(D)	(D)	(D)	-	(D)	-
Payroll.....\$1,000..	19,227	197	19,030	(D)	-	(D)	(D)	(D)	-	(D)	-
Production, development, and exploration workers:											
Total.....number..	2,447	19	2,428	(D)	-	(D)	(D)	(D)	-	(D)	-
Man-hours.....1,000..	4,516	37	4,479	(D)	-	(D)	(D)	(D)	-	(D)	-
Wages.....\$1,000..	14,411	139	14,272	(D)	-	(D)	(D)	(D)	-	(D)	-
Value added in mining.....do....	64,059	(1)	64,177	(D)	-	(D)	(D)	(D)	-	(D)	-
Value of shipments and receipts.....do....	83,476	60	83,416	(D)	-	(D)	(D)	(D)	-	(D)	-
Capital expenditures.....do....	5,445	343	5,102	(D)	-	(D)	(D)	(D)	-	(D)	-
Producing establishments by type of operation, total.....number..	11	3	3	-	-	2	1	1	-	1	-
Mines only:											
Open-pit.....do....	2	-	1	-	-	1	-	-	-	-	-
Underground.....do....	1	1	-	-	-	-	-	-	-	-	-
Mines with treatment plants:											
Open-pit.....do....	2	-	2	-	-	-	-	-	-	-	-
Underground.....do....	4	1	-	-	-	1	-	1	-	1	-
Treatment plants only.....do....	2	1	-	-	-	-	1	-	-	-	-

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left. n.e.c. Not elsewhere classified.

\*Not shown since the cost of supplies, minerals received for treatment, fuels, purchased electric energy, contract work, and purchased machinery installed exceeded value of shipments and receipts and capital expenditures.



TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts and Net Shipments of Primary Products: 1963 and 1958

(In thousands of dollars)

Ind. code	Industry and year	Value of shipments and receipts of establishments classified in the industry					Value of net shipments of primary products of the industry shipped by establishments in all industries		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total (produced in all industries)	Produced in this industry	Produced in other industries
1051	Bauxite.....1963..	21,491	(D)	(D)	-	-	20,478	20,478	-
	.....1958..	18,174	18,155	-	19	-	17,355	17,355	-
1062	Manganese ores.....1963..	7,228	(D)	-	-	(D)	12,804	12,804	-
	.....1958..	39,385	(D)	(D)	(D)	-	32,776	(D)	(D)
1064 and 1069	Tungsten ores and ferroalloy ores, n.e.c.....1963..	83,476	(D)	(D)	-	-	100,652	(D)	(D)
	.....1958..	72,136	(D)	(D)	(D)	-	81,543	(D)	(D)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
<sup>1</sup>Includes the value of purchases for resale.

TABLE 6A. Primary Products of the Industry: 1963 and 1958

Item	1963				1958					
	Production  (1,000 long tons)	Shipments including interplant transfers or receipts			Production  (1,000 long tons)	Shipments including interplant transfers or receipts				
		Quantity (1,000 long tons)	Dried bauxite equivalent (1,000 long tons)	Value (\$1,000)		Quantity (1,000 long tons)	Dried bauxite equivalent (1,000 long tons)	Value (\$1,000)		
BAUXITE										
Production and shipments:										
Crude (undried) bauxite—										
Mined.....	1,863	(X)	(X)	(X)	1,612	(X)	(X)	(X)		
Shipped to treatment plants.....	(X)	139	79	( <sup>2</sup> )	(X)	143	117	800		
Shipped to consumers.....	(X)	1,789	1,478	20,478	(X)	1,519	1,259	14,807		
Treated bauxite, total <sup>3</sup> .....	(D)									
Dried.....	59				59	59	674	136	137	161
Calcined and activated.....	(D)	(D)	(D)	(D)	92	93	93	1,047		
					44	44	68	1,501		
MANGANESE ORES										
Production and shipments:										
Crude manganese ores.....										
Manganese treated ores, nodules, and sinter (including washed material), total.....	55	(D)	(D)		1,395	508		17,448		
Containing less than 35 percent manganese.....	70	89	6,752		333	321		20,383		
Containing 35 percent or more manganese.....	70	89	6,752		9	9		286		
Manganese crude and treated ores treated:										
Produced and treated at same establishment.....	(D)	(X)	(X)		1,061	(X)	(X)	(X)		
Received from other establishments for treatment.....	(X)	62	4,424		(X)	493		10,675		

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>The average chemical analysis, dry basis, of crude bauxite shipped in 1963 was: Al<sub>2</sub>O<sub>3</sub>, 49.9 percent; SiO<sub>2</sub>, 14.2 percent; Fe<sub>2</sub>O<sub>3</sub>, 7.4 percent; FeO, 4.7 percent; TiO<sub>2</sub>, 2.3 percent; loss on ignition, 26.2 percent. The average free moisture in crude bauxite shipped was 16.3 percent.

<sup>2</sup>Not shown to avoid disclosing figures for kaolin shipped as a secondary product by 4 bauxite establishments.

<sup>3</sup>For 1963, the quantity of crude or dried bauxite received from other establishments for treatment or mined and treated in the same establishment was 234 thousand long tons.

**TABLE 6B. Product Classes—Indexes of Production and Unit Value for Primary Products Shipped by All Producers: 1963 and 1958**

Product code	Product and year	Indexes (1954 = 100)	
		Production	Unit value
1051	Bauxite (net shipments).....1963..	84	153
	.....1958..	80	135
106-	Ferroalloy ores <sup>1</sup> .....1963..	81	98
	.....1958..	74	93
1062	Manganese ores.....1963..	20	110
	.....1958 <sup>2</sup> .	138	104

<sup>1</sup>Adjusted to represent also Tungsten Ores and Ferroalloy Ores, N.E.C., for which separate statistics are not shown.

<sup>2</sup>Based on Bureau of Mines data on metal content and value of ores.

**TABLE 7A. Supplies Used in the Industries: 1963 and 1958**

Industry and supplies used	Unit of measure	1963		1958	
		Quantity	Cost (\$1,000)	Quantity	Cost (\$1,000)
INDUSTRY 1051.—BAUXITE					
Supplies used, total.....	.....	(X)	660	(X)	728
Explosives.....	1,000 lbs.....	}	(X)	{	450
Steel mill shapes and forms.....	Short tons.....				77
All other supplies <sup>1</sup> .....	.....	(X)	1,553	(X)	628
GROUP 106.—FERROALLOY ORES					
Supplies used, total.....	.....	(X)	15,374	(X)	15,817
Explosives.....	1,000 lbs.....	}	(X)	{	3,760
Steel mill shapes and forms.....	Short tons.....				1,481
All other supplies <sup>1</sup> .....	.....	(X)	11,764	(X)	14,234

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Includes costs undistributed by type of supply amounting to \$24 thousand in 1963 for the Bauxite Industry; \$87 thousand in 1963 and \$632 thousand in 1958 for the Manganese Ores Industry; and \$34 thousand in 1963 and \$131 thousand in 1958 for the Tungsten Ores and Ferroalloy Ores, N.E.C., Industry.

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963

Ind. code	Industry, geographic area, and type of operation	Aggregate horsepower per production worker		1963 (1,000 hp.)									
				Aggregate horsepower (prime movers and electric motors driven by purchased energy)					Prime movers				
				Total	Loading equipment	Transportation equipment		All other equipment	Total	By type of equipment			
		1963	1954			Highway type	Other			Loading equipment	Transportation equipment		All other equipment
											Highway-type	Other	
1051	Bauxite.....	70	74	29	3	16	3	7	19	1	16	1	1
	West South Central (Arkansas)...	68	75	25	3	14	3	5	17	1	14	2	(Z)
	Mines only.....	70	78	24	3	14	3	4	16	1	14	1	(Z)
	Manganese ores.....	111	47	20	3	3	2	12	8	2	3	2	1
	Tungsten ores and ferroalloy ores, n.e.c.....	56	57	137	9	21	8	99	33	3	21	6	3
1963 (1,000 hp.)--Continued													
Prime movers--Continued				Electric motors									
By use				Total	By type of equipment				By source of energy				
		Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment		Driven by purchased energy	Driven by energy generated at the establishment			
1051	Bauxite.....	-	19	10	2	2	6	10	-				
	West South Central (Arkansas)...	-	17	8	2	1	5	8	-				
	Mines only.....	-	16	8	2	2	4	8	-				
	Manganese ores.....	(Z)	8	12	1	(Z)	11	12	-				
	Tungsten ores and ferroalloy ores, n.e.c.....	1	32	104	6	2	96	104	-				

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified. (Z) Less than 500 thousand horsepower.

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with an average of-					
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1051.—BAUXITE							
Number of establishments, total.....	17	15	-	1	1	-	-
Number reporting water use, total.....	15	13	-	1	1	-	-
By source of water:							
Utility.....	1	1	-	-	-	-	-
Other than utility.....	7	5	-	1	1	-	-
Source not specified.....	7	7	-	-	-	-	-
By quantity of water intake:							
Under 1 million gallons.....	13	13	-	-	-	-	-
1-9 million gallons.....	1	-	-	-	1	-	-
10-99 million gallons.....	1	-	-	1	-	-	-
INDUSTRY 1062.—MANGANESE ORES							
Number of establishments, total.....	17	16	1	-	-	-	-
Number reporting water use, total <sup>1</sup> .....	9	8	1	-	-	-	-
By source of water:							
Utility.....	6	6	-	-	-	-	-
Other than utility.....	1	-	1	-	-	-	-
Source not specified.....	2	2	-	-	-	-	-
By quantity of water intake:							
Under 1 million gallons.....	6	6	-	-	-	-	-
1-9 million gallons.....	2	1	1	-	-	-	-
10-99 million gallons.....	1	1	-	-	-	-	-
INDUSTRY 1064 AND 1069.—TUNGSTEN ORES AND FERROALLOY ORES, N.E.C.							
Number of establishments, total.....	41	35	3	1	1	-	1
Number reporting water use, total <sup>1</sup> .....	20	14	3	1	1	-	1
By source of water:							
Utility.....	3	2	-	-	-	-	1
Other than utility.....	9	4	3	1	1	-	-
Source not specified.....	8	8	-	-	-	-	-
By quantity of water intake:							
Under 1 million gallons.....	14	13	1	-	-	-	-
1-9 million gallons.....	1	-	1	-	-	-	-
10-99 million gallons.....	2	-	-	1	-	-	1
100 million gallons and over.....	3	1	1	-	1	-	-

Footnote: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Not elsewhere classified.

<sup>2</sup>The Manganese Ores Industry had 224 employees and value added in mining of \$2,348 thousand in 1963; of these totals, establishments reporting water use accounted for 201 employees and value added of \$2,190 thousand. The Tungsten and Ferroalloy Ores, N.E.C., Industries had 2,878 employees and value added of \$44,023 thousand in 1963, with establishments reporting water use accounting for 2,789 employees and value added of \$64,003 thousand.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour: 1963

Tons per man-hour <sup>1</sup>	Estab- lishments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expendi- tures
		Total	Payroll	Total	Man-hours	Wages			
	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
INDUSTRY 1051.—BAUXITE									
All establishments, total.....	17	552	3,442	414	751	2,305	17,464	21,491	269
Less than 0.40.....	1	56	269	43	76	184	613	1,195	113
0.50 to 0.59.....	1								
0.60 to 0.69.....	1								
0.70 to 0.79.....	1								
1.20 to 1.39.....	1	45	247	40	83	212	628	1,404	4
2.00 to 2.39.....	1								
Unclassified <sup>2</sup> .....	11	451	2,926	331	592	1,910	16,223	18,892	152
INDUSTRY 1062.—MANGANESE ORES									
All establishments, total.....	17	224	1,138	180	351	820	2,348	7,228	386
0.10 to 0.19.....	1	54	264	41	84	192	795	909	5
0.20 to 0.29.....	2								
0.30 to 0.39.....	2								
0.80 to 0.89.....	1								
Unclassified <sup>2</sup> .....	11	75	354	57	109	212	728	2,073	171

<sup>1</sup>For bauxite, represents long tons of dried bauxite equivalent shipped per man-hour worked by production, development, and exploration workers. For manganese ores, represents long tons of manganese crude ores, treated ores, and agglomerates shipped per man-hour.

<sup>2</sup>Represents nonproducing establishments and establishments with no production, development, or exploration worker man-hours, with man-hours spent on exploration or development work amounting to 30 percent or more of total man-hours of production, development, and exploration workers, with cost of contract work amounting to 30 percent or more of production, development, and exploration worker wages, or with number of working proprietors amounting to 30 percent or more of number of production, development, and exploration workers. Also, includes figures for the number and payroll of employees at separately reported central offices and related facilities, if any.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963

Industry and ratio of payroll to value added in mining <sup>1</sup>	Establishments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expendi- tures
		Total	Payroll	Total	Man-hours	Wages			
	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
	INDUSTRY 1051.—BAUXITE								
United States, total.....	17	552	3,442	414	751	2,285	17,464	21,491	269
Less than 0.29.....	4	408	2,659	314	562	1,821	15,841	18,266	148
0.30 to 0.39.....	4	59	315	46	89	238	847	1,716	43
0.40 and over.....	6	69	329	54	100	224	657	1,362	76
Undistributed <sup>2</sup> .....	3	16	139	-	-	2	119	147	2
	INDUSTRY 1062.—MANGANESE ORES								
United States, total.....	17	224	1,138	180	351	820	2,348	7,228	386
Less than 0.39.....	3	32	276	20	48	145	1,184	2,484	66
0.40 to 0.49.....	3	143	754	118	234	586	2,239	4,744	214
0.60 to 0.69.....	1								
0.70 to 0.79.....	1								
1.00 and over.....	6								
Undistributed <sup>2</sup> .....	3	49	108	42	69	89	( <sup>3</sup> )	-	106
	INDUSTRY 1064 AND 1069.—TUNGSTEN ORES AND FERROALLOY ORES, N.E.C.								
United States, total.....	41	2,878	19,227	2,447	4,516	14,411	64,059	83,476	5,445
0.10 to 0.19.....	1	2,638	17,634	2,299	4,170	13,518	63,542	83,172	3,598
0.20 to 0.29.....	1								
0.30 to 0.39.....	5								
0.50 to 0.59.....	2								
1.00 and over.....	5	132	773	124	301	747	802	304	1,304
Undistributed <sup>2</sup> .....	27	108	820	24	45	146	( <sup>3</sup> )	-	543

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. n.e.c. Not elsewhere classified.

<sup>1</sup>In computing these ratios contract employment serving the establishment is excluded. The cost of contract work expressed as a percent of payroll for 1963 was: for bauxite, 36 percent; for manganese ores, 9 percent; for tungsten ores and ferroalloy ores, n.e.c., 19 percent.

<sup>2</sup>Represents establishments with zero or negative value added, establishments with no employees and, for number of employees and payroll, includes figures for separately reported central offices and related facilities.

<sup>3</sup>Not shown since the cost of supplies, minerals received for treatment, fuels, purchased electric energy, contract work, and purchased machinery installed exceeded value of shipments and receipts and capital expenditures.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963

Value added per employee class <sup>1</sup>	Number of employees	Number of establishments with average employment of—							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1051.—BAUXITE									
Total.....	552	17	13	2	-	1	1	-	-
Less than \$3,000.....	-	-	-	-	-	-	-	-	-
\$5,000 to \$9,999.....	34	{	1	1	-	-	-	-	-
\$9,000 to \$9,999.....			2	2	-	-	-	-	-
\$10,000 to \$12,499.....	29	{	3	2	1	-	-	-	-
\$12,500 to \$14,999.....	68		3	2	1	-	-	-	-
\$17,500 to \$19,999.....	405	{	2	2	-	-	-	-	-
\$20,000 and over.....			3	1	-	-	1	1	-
Undistributed <sup>2</sup> .....	16		3		-	-	-	-	-
INDUSTRY 1062.—MANGANESE ORES									
Total.....	224	17	12	4	1	-	-	-	-
Less than \$3,000.....	48	6	5	1	-	-	-	-	-
\$6,000 to \$8,999.....	143	{	1	1	-	-	-	-	-
\$8,000 to \$8,999.....			2	2	-	-	-	-	-
\$9,000 to \$9,999.....			1	-	1	-	-	-	-
\$10,000 to \$12,499.....			1	1	-	-	-	-	-
\$20,000 and over.....	32		3	2	1	-	-	-	-
Undistributed <sup>2</sup> .....	1		3		-	-	-	-	-
INDUSTRY 1064 AND 1069.—TUNGSTEN ORES AND FERROALLOY ORES, N.E.C.									
Total.....	2,878	41	35	-	3	1	1	-	1
Less than \$3,000.....	45	11	11	-	-	-	-	-	-
\$3,000 to \$3,999.....	68	{	1	1	-	-	-	-	-
\$4,000 to \$4,999.....			3	2	1	-	-	-	-
\$7,000 to \$7,999.....	431	{	1	1	-	-	-	-	-
\$8,000 to \$8,999.....			1	-	1	-	-	-	-
\$10,000 to \$12,499.....	2,259	{	1	1	-	-	1	-	-
\$12,500 to \$14,999.....			1	-	-	-	1	-	-
\$17,500 to \$19,999.....	75	{	1	-	1	-	-	-	-
\$20,000 and over.....			2	-	-	1	-	-	1
Undistributed <sup>2</sup> .....			19		-	-	-	-	-

Standard Notes: - Represents zero; (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. n.e.c. Not elsewhere classified.

<sup>1</sup>In computing these ratios contract employment serving the establishment is excluded. The cost of contract work expressed as a percent of payroll for 1963 was: for bauxite, 36 percent; for manganese ores, 9 percent; for tungsten and ferroalloy ores, n.e.c., 19 percent.

<sup>2</sup>Represents establishments with no employees or with negative value added in mining and for number of employees, figures for separately reported central offices and related facilities.

TABLE 11. Hourly Earnings of Production, Development, and Exploration Workers for Establishments with 10 or More Employees: 1963

Industry by hourly earnings classes	Number of employees	Number of establishments with 10 or more employees in—									
		Total	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
INDUSTRY 1051.—BAUXITE											
Total.....	520	8	-	-	-	-	1	2	5	-	
\$2.00 to \$2.49.....	59	4	-	-	-	-	1	2	1	-	
\$2.50 to \$2.99.....	461	2	-	-	-	-	-	-	2	-	
\$3.00 to \$3.49.....		2	-	-	-	-	-	-	2	-	
INDUSTRY 1062.—MANGANESE ORES											
Total.....	(D)	7	-	1	-	-	1	-	1	3	
\$1.00 to \$1.49.....	57	3	-	-	-	-	-	-	1	1	
\$2.00 to \$2.49.....	(D)	2	-	-	-	-	-	-	-	2	
\$2.50 to \$2.99.....	(D)	1	-	-	-	-	1	-	-	-	
\$3.00 to \$3.49.....	(D)	1	-	1	-	-	-	-	-	-	
INDUSTRIES 1064 AND 1069.—TUNGSTEN ORES AND FERROALLOY ORES, N.E.C.											
Total.....	(D)	9	-	1	-	-	1	-	-	4	
\$1.50 to \$1.99.....	192	1	-	-	-	-	1	-	-	-	
\$2.00 to \$2.49.....		2	-	1	-	-	-	-	-	-	
\$3.00 to \$3.49.....		4	-	-	-	-	-	-	-	2	
No production, development, or exploration workers.....	(D)	2	-	-	-	-	-	-	-	2	

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. n.e.c. Not elsewhere classified.

TABLE 12. Distribution of Operating Companies, by Employment Size and by Number of Establishments: 1963

Industry by establishment count	Number of—		Number of establishments with average employment of—									
	Operating companies	Employees	Total	0 to 4	5 to 9	10 to 19	20 to 49	50 to 99	100 to 249	250 to 499	500 to 999	1,000 employees and over
INDUSTRY 1051.—BAUXITE												
Total.....	10	552	17	6	3	4	2	-	1	1	-	-
Multiunit companies, total.....	6	524	13	4	2	3	2	-	1	1	-	-
1 establishment <sup>1</sup> .....	4	524	4	-	-	-	2	-	1	1	-	-
2 establishments.....	1		2	-	1	1	-	-	-	-	-	-
7 to 9 establishments.....	1		7	4	1	2	-	-	-	-	-	-
Single unit companies.....	4	28	4	2	1	1	-	-	-	-	-	-
INDUSTRY 1062.—MANGANESE ORES												
Total.....	16	224	17	8	2	2	4	1	-	-	-	-
Multiunit companies, total.....	5	123	6	1	2	-	2	1	-	-	-	-
1 establishment <sup>1</sup> .....	4	123	4	-	1	-	2	1	-	-	-	-
2 establishments.....	1		2	1	1	-	-	-	-	-	-	-
Single unit companies.....	11	101	11	7	-	2	2	-	-	-	-	-
INDUSTRIES 1064 AND 1069.—TUNGSTEN ORES AND FERROALLOY ORES, N.E.C.												
Total.....	33	2,878	41	28	4	3	-	3	1	1	-	1
Multiunit companies, total.....	8	2,762	16	8	-	3	-	2	1	1	-	1
1 establishment <sup>1</sup> .....	5	513	5	1	-	1	-	2	-	1	-	-
2 establishments.....	2	2,249	4	2	-	1	-	-	1	-	-	-
7 to 9 establishments.....	1		7	5	-	1	-	-	-	-	-	1
Single unit companies.....	25	116	25	20	4	-	-	1	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.

<sup>1</sup>Represents companies having at least one establishment classified in other industries.

## METAL MINING SERVICES AND MISCELLANEOUS METAL ORES

This report shows 1963 Census of Mineral Industries statistics for establishments classified in Industry Group 108, Metal Mining Services, and Industry Group 109, Miscellaneous Metal Ores. The separate industries included in these groups are as follows:

### SIC Code and Title

- 1081—Metal Mining Services
- 1092—Mercury Ores
- 1093—Titanium Ores
- 1094—Uranium—Radium—Vanadium Ores
- 1099—Metallic Minerals (Ores), Not Elsewhere Classified

### METAL MINING SERVICES

Industry 1081—Metal Mining Services. This industry represents establishments primarily engaged in metal mining services for others on a contract fee, or other basis, such as removal of overburden, strip mining, prospect and test drilling, and mine exploration and development. Establishments primarily engaged in performing hauling services are excluded from this industry and all other industries in the Mining Division.

Establishments classified in the metal mining services industries were permitted to file one report for all mining services performed in the United States. These reports were classified on the basis of the principal type of services performed and the principal industry served to determine their industry or subindustry classification. (Selected subindustry statistics are shown in tables 1, 2, and 3 of this report.) Each report submitted included data on the amount received for services, capital expenditures in 1963, and the number of employees in March by State and county. For geographic area statistics in table 2 other figures in each report were allocated on the basis of these reported data. For all other geographic area statistics for this industry in this report the classification is based on the principal area in which each contractor performed services.



PAYMENTS AND RECEIPTS FOR SERVICES AND AMOUNTS CAPITALIZED FOR  
CONSTRUCTION AT METAL MINING ESTABLISHMENTS: 1963

Industry served	Cost of contract work as reported by mine operators (\$1,000)	Receipts for contract services reported in the metal mining industries			Capital expenditures by metal mine operators for treatment plant and other construction (\$1,000)
		Total (\$1,000)	By metal mining services industries (\$1,000)	By metal operators classified in metal mining industries (\$1,000)	
Metal mining, total.....	110,801	35,799	<sup>1</sup> 32,357	3,442	83,790
Iron ores.....	55,510	23,840	{ 4,044 17,990 }	1,234 713	{ 51,734 24,718 }
Copper ores.....	30,537				
Lead, zinc, gold, and silver ores.....	5,386	3,555	3,414		1,739
Uranium-radium-vanadium and other metal ores <sup>2</sup> .....	19,368	8,404	6,909	1,495	5,599

<sup>1</sup>Includes receipts for secondary services and products amounting to \$1,344 thousand.

<sup>2</sup>Includes expenditures by metal mining services establishments.

Companies which had complete responsibility for operating mines for others on a contract basis were requested to report as mine operators rather than as mineral service establishments. Data for such activities are excluded from the statistics in this report on the metal mining services industries but are included in the appropriate metal mining industry report. The receipts for performing such contract operations are not shown anywhere in the census of mineral industries.

The total receipts in the metal mining services industry in 1963 amounted to \$32 million, about 96 percent of which was for services primary to this service industry.

The total receipts in 1963 for services performed by establishments classified in Major Group 10, as shown in the table above was \$35 million. The latter value represents 32 percent of total payments to contractors reported by metal mining establishments, including payments to subcontractors by metal mining service establishments. Receipts for services by the metal mining services industry represented about 90 percent of all services performed by establishments classified in Major Group 10. It appears that the difference between total contract payments reported and total receipts for services, amounting to \$75 million, primarily represented payments to contractors for construction of mills and other facilities at mine and mill properties. The last column of the table above shows that total capital expenditures by metal mine operators for treatment plant and other construction were \$84 million and that such expenditures, by industry were roughly comparable in magnitude to the difference between contract payments and contract receipts. (The metal mining services industries do not include contract construction. Service establishments wholly engaged in such construction were not reported in the 1963 minerals census. Service establishments performing both mining services and contract

construction were asked to exclude construction activities from their minerals census reports. On the other hand, metal mining establishments were requested to report expenditures for treatment plant and other construction.) A part of the difference between contract payments and contract receipts is probably explained by the inclusion of payments by mine operators for contract hauling and the exclusion from the mining services industries of establishments predominately engaged in hauling. The table at the top of the preceeding page summarizes, by metal mining industry served, the reported data on payments and receipts for contract services and capital expenditures on construction in Major Group 10 in 1963.

#### MISCELLANEOUS METAL ORES

Industry 1092—Mercury Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing mercury ores. This industry includes the production of metallic mercury by furnacing or retorting at the mine site.

Industry 1093—Titanium Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing titanium ores.

Industry 1094—Uranium-Radium-Vanadium Ores. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing uranium-radium-vanadium ores.

Industry 1099—Metallic Minerals (Ores), Not Elsewhere Classified. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing miscellaneous metallic minerals (ores), not elsewhere classified, such as antimony, beryllium, germanium, palladium, tin, zirconium, and rare-earth ores.

The total value of shipments and receipts of the Miscellaneous Metal Ores Industries in 1963 was \$355 million, of which primary products of these industries amounted to \$343 million, and secondary products, receipts for services, and products purchased and resold without further processing to \$12 million. Of this total value for the group, the Mercury Ores Industry accounted for \$4 million; the Titanium Ores Industry, \$22 million; the Uranium-Radium-Vanadium Ores Industry, \$326 million; and the Metallic Ores, N.E.C., Industry, \$3 million.

The above value figures for the Miscellaneous Metal Ores Industries represent gross value of shipments and receipts and contain duplication arising from the inclusion of the value of minerals transferred from one establishment to other establishments in the same industry for treatment. For the group as a whole, the value of minerals transferred to other establishments for treatment amounted to about \$82 million, or 23 percent of the gross value of shipments of all industries in this group. Of the total value of minerals transferred for treatment, 99 percent was in the Uranium-Radium-Vanadium Ores Industry.

The production index for the primary products of the miscellaneous metal ores industries increased to 491 in 1963 from the 1958 level of 441. The unit value index for 1963 was 79 compared to 93 for 1958. Both indexes were computed on a basis of 1954 = 100. For the Mercury Ores Industry the production index for 1963 was 90 compared to 193 for 1958. For the Titanium Ores Industry the 1963 production index was 168 compared with 109 for 1958. For the Uranium-Radium-Vanadium Ores Industry the 1963 production index was 679 compared with 600 for 1958 and for the Metallic Ores, N.E.C., Industry, the production index was 260 for 1963 and 285 for 1958.

The general statistics (employment, payrolls, value of shipments and receipts, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but

also their activities in the production of secondary products, and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7 to 12) with product statistics (table 6) showing production and shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5 which shows, insofar as possible, the value of primary and secondary products shipped by establishments classified in the specified industry and also the value of net shipments of primary products of the industry produced as secondary products by establishments classified in other industries.

#### COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the Miscellaneous Metal Ores Industries are, in general, comparable with product statistics for the same commodities published by the Bureau of Mines. The differences which occur result primarily from differences in data collection methods, coverage, and objectives sought. The most nearly comparable statistics from the two bureaus are shown in the table below. Major reasons for the differences in product statistics are:

1. The Bureau of the Census excludes small establishments whose value of shipments and reported costs were below \$500. The Bureau of Mines includes all reports obtained, regardless of size. However, the contribution to products of such small establishments which Census excludes is usually very small.
2. The Bureau of the Census values of shipments represent reported values f.o.b. mine or treatment plant. Some Bureau of Mines values are based on quantity of production or shipments and quoted market prices. For example, the figure shown in the table below for Bureau of Mines value of mercury metal produced was obtained by multiplying quantity production by the average 1963 price per flask in New York.
3. The Bureau of the Census figures for treated products include products treated from foreign materials. The Bureau of Mines figures for treated products represent only products treated from domestic materials.
4. Differences exist in coverage by the two bureaus. For titanium concentrate production, for example, the Bureau of the Census includes, and the Bureau of Mines excludes, data from establishments which engage only in treating or grinding titanium products.
5. For uranium-vanadium concentrates, the Bureau of the Census figures include low-grade concentrates shipped to treatment plants for upgrading. The Bureau of Mines figures for uranium-vanadium concentrates do not include such shipments.

## 1963 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Unit of measure	Bureau of the Census statistics			Bureau of Mines statistics		
		Pro-duction (quan-tity)	Shipments including inter-plant transfers		Pro-duction (quan-tity)	Shipments	
			Quan-tity	Value (\$1,000)		Quan-tity	Value (\$1,000)
Mercury ores:							
Crude mercury ores...	1,000 short tons.....	119	(D)	(D)	<sup>1</sup> 114	(NA)	(NA)
Mercury metal.....	Flasks (76 pounds)...	19,188	18,838	3,613	19,117	(NA)	<sup>2</sup> 3,623
Titanium ores:							
Crude titanium ores..	1,000 short tons.....	25,720	-	-	(NA)	(NA)	(NA)
Titanium concentrates	...do.....	901	902	16,836	900	901	17,791
Uranium-radium-vanadium ores:							
Crude uranium-vanadium ores.....	...do.....	6,383	2,806	77,048	<sup>3</sup> 5,646	(NA)	<sup>3</sup> 115,821
Uranium-vanadium concentrates.....	...do.....	<sup>4</sup> 110	<sup>4</sup> 107	<sup>4</sup> 241,092	<sup>5</sup> 18	(NA)	<sup>5</sup> 238,788
Zirconium concentrates.	Short tons.	78,279	78,810	3,465	(NA)	(NA)	} 5,742
Antimony, beryllium, germanium, bast-naesite, monazite, and thorium concentrates and platinum group metals.....	.....	(X)	(X)	1,694	(X)	(X)	

- Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (X) Not applicable. (NA) Not available.

<sup>1</sup>Represents mercury ores treated.

<sup>2</sup>Represents value of production.

<sup>3</sup>Represents uranium ore. The value figure represents the value of such ore at the mine.

<sup>4</sup>Includes lignite ash valued for its uranium content, slurry, and low-grade concentrates shipped to mills for further upgrading.

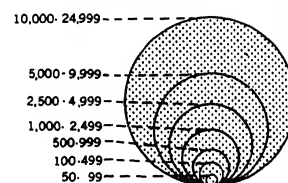
<sup>5</sup>Represents 14 thousand tons of U<sub>3</sub>O<sub>8</sub> contained in uranium concentrates valued at \$225,000 thousand and 4 thousand tons of vanadium contained in vanadium concentrates valued at \$13,788 thousand.

# METAL MINING SERVICES AND MISCELLANEOUS METAL ORES

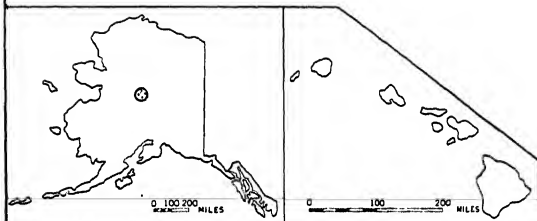
Distribution of Employment by State: 1963



Employment



No circle is shown for States with fewer than 50 employees.



Employment: 1840-1963

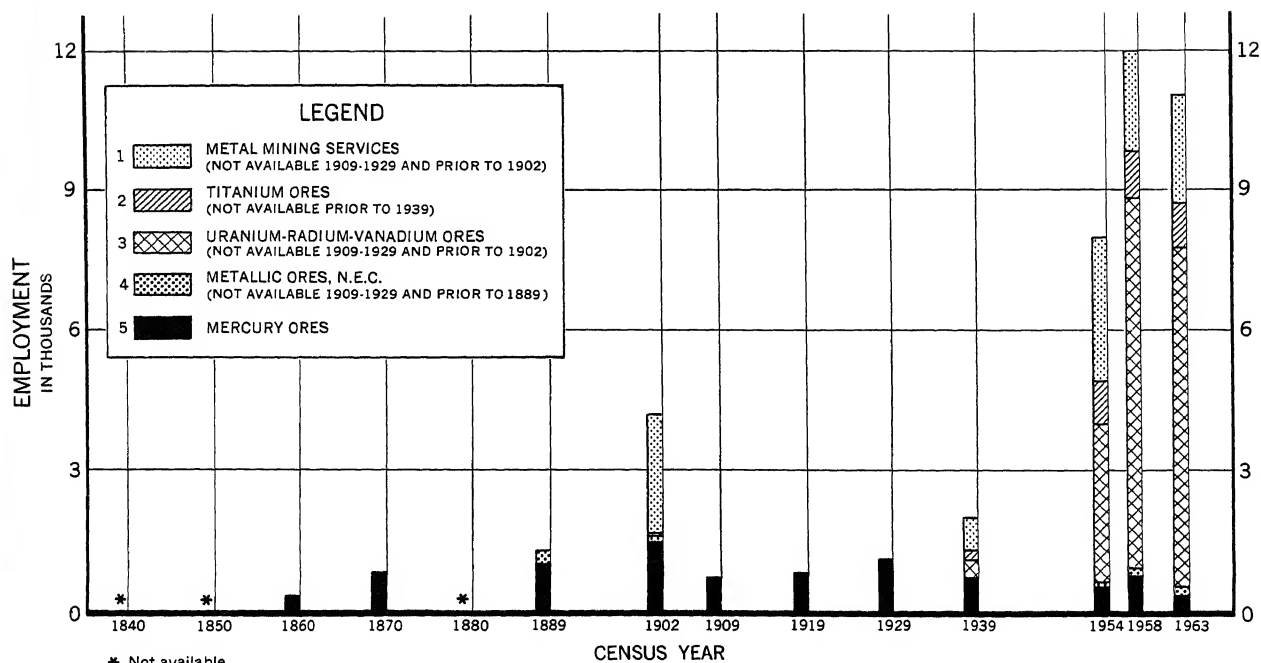


TABLE 1. **General Statistics: 1963 and Earlier Years**

Industry or sub-industry and year	Operating companies (number)	Establishments		All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Selected expenses				Value of shipments and receipts (\$1,000)	Value of net shipments and receipts <sup>1</sup> (\$1,000)	Quantity of primary products <sup>2</sup>	Capital expenditures (\$1,000)	Horse-power rating of power equipment (1,000)
		Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)		Supplies, purchases for resale, fuels, and purchased electric energy (\$1,000)	Minerals received for treatment (\$1,000)	Contract or sub-contract work (\$1,000)	Purchased machinery installed (\$1,000)					
GROUP 108.—METAL MINING SERVICES																		
1963.....	82	83	17	2,206	13,923	1,891	4,018	11,485	24,736	6,486	(X)	393	3,784	32,360	32,357	(X)	3,039	185
1958.....	91	95	23	2,184	12,097	1,973	4,274	10,624	22,862	8,988	(X)	432	3,365	32,384	32,384	(X)	1,263	(NA)
1954.....	114	114	26	3,059	15,268	2,863	6,519	13,933	26,703	11,818	(X)	509	2,049	38,679	38,539	(X)	2,400	152
1939.....	69	(NA)	(NA)	695	985	637	1,344	853	1,822	546	(X)	(NA)	(NA)	(NA)	2,368	(X)	47	23
1902 <sup>3</sup> .....	(NA)	(NA)	(NA)	2,574	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(X)	(NA)	(NA)	(NA)	1,373	(X)	(NA)	(NA)
Iron ores services:																		
1963.....	14	14	3	342	1,780	290	565	1,420	3,245	799	(X)	17	287	4,044	4,044	(X)	304	10
1958.....	17	17	8	805	4,066	748	1,603	3,613	6,517	3,605	(X)	52	325	10,279	10,279	(X)	220	(NA)
1954.....	20	20	(NA)	810	4,209	759	1,695	3,848	6,753	3,801	(X)	140	383	10,351	10,351	(X)	726	43
1939.....	6	6	(NA)	109	152	98	175	128	197	57	(X)	(NA)	(NA)	(NA)	254	(X)	27	2
Copper ores services:																		
1963.....	15	15	6	1,364	8,852	1,148	2,458	7,062	13,960	3,867	(X)	237	2,343	17,993	17,990	(X)	2,414	82
1958.....	11	12	6	629	3,447	581	1,262	3,191	9,235	1,926	(X)	165	764	11,329	11,329	(X)	761	(NA)
1954.....	8	8	(NA)	952	5,024	(NA)	2,215	(NA)	10,202	4,727	(X)	-	727	14,836	14,836	(X)	820	35
1939.....	6	6	(NA)	88	124	84	169	115	316	37	(X)	(NA)	(NA)	(NA)	353	(X)	9	2
Lead and zinc ores services:																		
1963.....	24	24	2	187	1,127	170	328	1,034	1,954	819	(X)	22	62	2,775	2,775	(X)	82	10
1958.....	12	12	-	39	157	39	76	147	343	95	(X)	5	6	429	429	(X)	20	(NA)
1954.....	19	19	(NA)	156	768	(NA)	347	(NA)	1,103	156	(X)	20	20	1,281	1,281	(X)	18	5
1939.....	18	18	(NA)	200	246	184	409	212	383	154	(X)	(NA)	(NA)	(NA)	537	(X)	3	9
Uranium-radium-vanadium ores services: <sup>5</sup>																		
1963.....	20	20	5	263	1,995	243	592	1,834	4,615	831	(X)	117	990	6,462	6,462	(X)	91	38
1958.....	(NA)	46	8	647	4,164	547	1,227	3,431	6,329	3,212	(X)	92	240	9,628	9,628	(X)	245	(NA)
Other metal ores services:																		
1963.....	10	10	1	48	169	40	75	135	962	170	(X)	-	102	1,086	1,086	(X)	148	45
1958.....	(NA)	8	1	64	263	58	106	242	438	150	(X)	118	30	719	719	(X)	17	(NA)
1954.....	67	67	(NA)	1,141	5,267	1,025	2,262	4,502	8,645	3,134	(X)	349	919	12,211	12,071	(X)	836	69
1939 <sup>5</sup> .....	39	39	(NA)	298	463	271	591	398	926	298	(X)	(NA)	(NA)	(NA)	1,224	(X)	8	11
GROUP 109.—MISCELLANEOUS METAL ORES																		
1963.....	346	417	63	8,730	60,856	6,369	13,798	41,540	209,817	56,746	82,263	14,065	11,005	355,095	265,511	(X)	19,001	537
1958.....	708	758	79	9,790	53,093	7,851	16,673	40,800	196,488	71,255	110,535	69,845	22,720	365,234	254,699	(X)	105,609	(NA)
1954.....	701	781	39	4,881	20,686	3,982	8,536	16,250	(NA)	17,676	(NA)	7,957	7,596	(NA)	(NA)	(X)	20,383	242
1939.....	783	880	(NA)	1,339	1,708	1,182	2,622	1,390	2,837	874	(NA)	49	(NA)	(NA)	3,760	(X)	(NA)	19
Industry 1092.—Mercury Ores																		
1963.....	49	49	3	316	1,839	279	610	1,562	2,569	1,036	-	242	128	3,658	3,658	19,188	317	19
1958.....	77	79	9	652	3,112	569	1,223	2,627	7,093	91,951	(9)	55	270	8,607	(D)	33,812	862	(NA)
1954.....	81	87	5	453	1,972	372	841	1,607	3,355	91,425	(9)	28	326	4,519	(D)	17,487	515	12
1939.....	72	869	(NA)	702	916	621	1,421	752	1,425	401	(NA)	4	(NA)	(NA)	1,830	18,222	(NA)	10
1929 <sup>10</sup> .....	(NA)	40	(NA)	1,117	1,603	1,029	(NA)	1,383	2,042	763	(NA)	15	618	(NA)	2,820	23,769	(NA)	6
1919 <sup>10</sup> .....	(NA)	26	(NA)	819	1,049	748	(NA)	828	1,235	560	-	8	(NA)	1,803	1,803	(NA)	(NA)	3
1909.....	30	30	(NA)	670	564	622	(NA)	477	660	198	-	10	(NA)	868	868	(NA)	(NA)	1
1902.....	851	(NA)	(NA)	1,489	1,073	111,364	(NA)	909	1,198	329	(NA)	23	(NA)	(NA)	1,550	34,517	(NA)	2
1889 <sup>10</sup> .....	(NA)	811	(NA)	957	626	18917	(NA)	566	971	220	(NA)	(NA)	(NA)	(NA)	1,191	26,638	(NA)	2
1870.....	(NA)	4	(NA)	811	599	(NA)	(NA)	(NA)	787	31	(NA)	(NA)	(NA)	(NA)	818	(NA)	(NA)	(2)
1860.....	(NA)	3	(NA)	335	159	(NA)	(NA)	(NA)	216	166	(NA)	(NA)	(NA)	(NA)	382	(NA)	(NA)	(NA)
Industry 1093.—Titanium Ores <sup>1 3</sup>																		
1963.....	7	8	7	997	6,401	846	1,721	5,131	15,021	5,602	-	1,485	2,096	22,033	22,033	14901	2,171	61
1958.....	9	11	7	962	4,496	706	1,234	2,882	12,746	94,943	(9)	121	1,831	17,158	16,531	603	2,483	(NA)
1954.....	7	10	6	843	3,699	568	1,261	2,397	11,134	93,993	(9)	335	1,286	12,750	(D)	14557	3,098	46
1939.....	3	83	(NA)	196	182	183	322	140	370	88	(NA)	-	(NA)	(NA)	458	16	(NA)	2
Industry 1094.—Uranium-Radium-Vanadium Ores <sup>1 5</sup>																		
1963.....	266	335	51	6,665	45,219	5,114	11,251	34,170	190,629	49,145	81,636	12,334	8,555	326,370	16244,738	6,383	15,929	434
1958.....	563	602	61	7,939	44,422	6,389	13,873	34,439	174,802	64,057	109,452	69,613	20,092	336,451	226,999	5,480	101,565	(NA)
1954.....	572	637	26	3,467	14,568	2,944	6,227	11,908	(17)	12,612	(17)	7,462	5,336	(17)	(17)	14,793	165	7
1939.....	8	83	(NA)	441	609	378	879	497	1,043	384	(NA)	45	(NA)	(NA)	1,472	105	(NA)	7
1902.....	3	83	(NA)	21	21	119	(NA)	17	45	3	(NA)	-	(NA)	(NA)	48	4	(NA)	7

TABLE 1. General Statistics: 1963 and Earlier Years—Continued

Footnotes for Table 1-10E

Note: See appendix A for explanation of column captions. For more detailed historical statistics for these industries see table 1 of the corresponding chapter of the 1954 Census of Mineral Industries, Vol. 1.

- Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.
- (Z) Less than 500 horsepower. n.e.c. Not elsewhere classified.
- <sup>1</sup>Figures for 1939 and earlier years represent value of net production and receipts.
- <sup>2</sup>Represents production. For the Mercury Ores Industry, represents flasks (76 pounds each) of mercury metal. For the Titanium Ores Industry, represents thousands of short tons of titanium (ilmenite and rutile) concentrates; for the Uranium-Radium-Vanadium Ores Industry, represents thousands of short tons of crude uranium-vanadium ores.
- <sup>3</sup>Represents number of employees engaged in contract work and payments for contract work as reported by companies operating metal mines.
- <sup>4</sup>Gold services establishments are included with copper ores services establishments. For 1958, only one gold services establishment, with less than 5 employees, was reported.
- <sup>5</sup>For 1954 and 1939, figures for uranium-radium-vanadium ores services establishments are included with those for other metal ores services establishments.
- <sup>6</sup>Excludes data for Alaska. In 1958 and 1954, 2 establishments in Alaska were reported in the Mercury Ores Industry; in 1958, 1 in the Uranium-Radium-Vanadium Ores Industry; and in 1958, 2, and in 1954, 5 establishments in the Metallic Ores, N.E.C. Industry.
- <sup>7</sup>Represents the sum of the figures shown for the separate industries and may include some duplication due to the same company operating in more than one industry.
- <sup>8</sup>Represents number of mines.
- <sup>9</sup>The figure for the cost of minerals received for treatment is combined with the figure for the cost of supplies, purchases for resale, fuels, and purchased electric energy. For 1954, the combined cost of minerals received for preparation for the Mercury Ores, Titanium Ores, and Metallic Ores, N.E.C., Industries was \$1,082 thousand.
- <sup>10</sup>Excludes nonproducing operations as follows: 1929, 13 establishments; 1919, 2 establishments; and 1889, 6 mines.
- <sup>11</sup>Figures for the average number of production, development, and exploration workers were converted to a 300-day basis for establishments which operated for a shorter period.
- <sup>12</sup>Represents the average number during the times the mines were active.
- <sup>13</sup>In addition to the years shown, titanium ores establishments were reported as follows: 1929, 1; 1919, 2; 1909, 1; and 1902, 1.
- <sup>14</sup>Includes production by industries other than Titanium Ores.
- <sup>15</sup>In addition to the years shown, uranium-radium-vanadium ores establishments were reported as follows: 1929, 2; 1919, 13; and 1909, 2.
- <sup>16</sup>Includes purchases for resale without further processing.
- <sup>17</sup>Not available. Figures for quantity of ores and concentrates, value of shipments, and cost of minerals received for treatment were not collected in the 1954 census. The Uranium chapter of the 1959 Minerals Yearbook (United States Department of the Interior, Bureau of Mines) shows uranium ore production in 1954 as 914 thousand short tons. On the basis of these and other figures in this 1959 Minerals Yearbook, it is estimated that the value of shipments and receipts of the Uranium-Radium-Vanadium Ores Industry in 1954 was between \$70 and \$90 million, that the value of net shipments and receipts was between \$30 and \$50 million, that value added in mining was between \$20 and \$40 million and that cost of minerals received for treatment between \$30 and \$50 million.
- <sup>18</sup>In addition to the years shown, metallic ores, n.e.c., establishments were reported as follows: 1939, 1; 1929, 1; and 1909, 3.
- <sup>19</sup>Represents antimony operations and selected figures for 678 nonproducing tin openings.
- <sup>20</sup>Not shown since the cost of supplies and contract work exceeds the value of shipments and receipts.

TABLE 2. General Statistics by Geographic Areas and Type of Operation: 1963 and 1958

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of primary products <sup>2</sup>	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
1081.—METAL MINING SERVICES, TOTAL <sup>3</sup> .....	83	17	2,206	13,923	1,891	4,018	11,485	24,736	10,663	32,360	(X)	3,039	2,184	22,862
<u>Geographic Area</u>														
Northeast region.....	21	2	88	619	54	115	333	565	132	686	(X)	11	186	1,552
East North Central division.....	16	2	112	667	93	204	477	977	364	1,312	(X)	29	135	1,104
Michigan.....	8	1	62	377	48	103	247	469	240	703	(X)	6	116	928
West North Central division.....	35	2	209	1,152	174	345	952	2,269	851	2,861	(X)	259	159	1,437
Minnesota.....	11	1	111	683	94	188	554	1,377	488	1,674	(X)	191	118	1,104
Missouri.....	18	1	85	433	73	143	366	835	341	1,110	(X)	66	(NA)	(NA)
South region.....	21	4	178	952	162	342	807	1,574	518	1,964	(X)	128	264	2,230
East South Central division.....	10	3	111	714	103	235	605	1,052	292	1,310	(X)	34	207	1,795
Mountain division.....	160	24	1,525	9,968	1,322	2,842	8,421	18,238	8,360	24,073	(X)	2,525	1,341	15,329
Montana.....	8	1	45	258	38	68	239	494	323	748	(X)	69	(NA)	(NA)
Wyoming.....	12	3	140	1,423	132	424	1,334	3,345	1,493	4,806	(X)	32	(NA)	(NA)
Colorado.....	35	3	162	708	139	256	618	1,717	664	2,232	(X)	149	317	2,773
New Mexico.....	11	-	57	380	53	107	321	546	203	705	(X)	44	215	2,630
Arizona.....	32	7	546	3,394	515	1,092	3,032	7,648	3,835	9,492	(X)	1,991	278	3,789
Utah.....	32	7	399	2,780	298	584	2,044	2,344	1,053	3,300	(X)	98	283	2,787
Nevada.....	23	3	151	904	133	283	758	1,786	662	2,313	(X)	135	118	1,741
Pacific division.....	42	1	94	565	86	171	498	1,113	438	1,464	(X)	87	99	1,210
California.....	27	-	46	267	40	81	229	620	243	794	(X)	69	(NA)	(NA)
<u>Principal Industry Served</u>														
Iron ores services.....	14	3	342	1,780	290	565	1,420	3,245	1,103	4,044	(X)	304	805	6,517
Copper ores services.....	15	6	1,366	8,852	1,148	2,458	7,062	13,960	6,447	17,993	(X)	2,414	4,629	49,235
Lead and zinc ores services.....	24	2	187	1,127	170	328	1,034	1,954	903	2,775	(X)	82	39	343
Uranium-radium-vanadium ores services.....	20	5	263	1,995	243	592	1,834	4,615	1,938	6,462	(X)	91	647	6,329
Other metal ores services <sup>4</sup> .....	10	1	48	169	40	75	135	962	272	1,086	(X)	148	464	4,438

See footnotes at end of table.

TABLE 2. General Statistics by Geographic Areas and Type of Operation: 1963 and 1958—Con.

Industry, geographic area, and type of operation <sup>1</sup>	1963												1958	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of primary products <sup>2</sup>	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	\$1,000	
1092.—MERCURY ORES, TOTAL.....	49	3	316	1,839	279	610	1,362	2,569	1,406	3,658	19,188	317	<sup>6</sup> 652	<sup>6</sup> 7,093
<u>Geographic Area</u>														
Mountain division.....	15	1	91	486	79	161	440	452	362	776	5,172	38	<sup>7</sup> 184	<sup>7</sup> 2,516
Pacific division.....	34	2	225	1,353	200	449	1,122	2,117	1,044	2,882	14,016	279	<sup>6</sup> 468	<sup>6</sup> 4,577
California.....	25	2	211	1,244	187	424	1,015	1,972	960	2,752	13,362	180	383	3,927
<u>Type of Operation</u>														
Producing establishments.....	32	3	291	1,775	260	574	1,513	2,613	1,361	3,679	19,058	295	630	7,084
Open-pit mines with treatment plants	23	1	44	229	40	81	216	613	304	791	2,425	126	105	1,275
1093.—TITANIUM ORES <sup>8</sup> .....	8	7	997	6,401	846	1,721	5,131	15,021	9,183	22,033	<sup>9</sup> 901	2,171	962	12,746
1094.—URANIUM-RADIUM-VANADIUM ORES, TOTAL.....	335	51	<sup>10</sup> 6,665	<sup>10</sup> 45,219	5,114	11,251	34,170	190,629	151,670	326,370	6,383	15,929	<sup>11</sup> 7,939	<sup>11</sup> 174,802
<u>Geographic Area</u>														
Mountain division.....	289	48	6,396	43,602	4,921	10,843	33,129	183,514	143,177	311,458	6,147	15,233	7,609	167,557
Wyoming.....	32	13	1,026	7,217	783	1,960	5,574	36,813	23,974	57,450	1,419	3,337	578	18,046
Colorado.....	123	13	1,740	10,083	1,386	2,826	7,663	30,022	33,729	60,871	1,109	2,880	2,500	29,176
New Mexico.....	26	7	2,433	19,270	1,827	4,200	14,821	72,340	38,332	105,260	2,625	5,412	2,184	62,787
Utah.....	89	9	865	5,336	638	1,313	3,740	40,422	40,683	79,758	672	1,347	1,791	49,545
<u>Type of Operation</u>														
Producing establishments, total.....	297	51	6,453	43,676	5,050	11,146	33,932	190,600	150,949	326,370	6,383	15,179	7,701	175,162
Mines only:														
Open-pit.....	43	1	117	662	101	213	557	5,594	1,800	6,760	508	634	320	9,049
Combination open-pit and underground.....	5	-	10	77	10	17	77	257	206	357	28	106	252	3,673
Underground:														
Open-stopping.....	190	18	1,589	9,631	1,436	3,006	8,498	33,895	8,364	40,324	1,526	1,935	2,339	56,513
Other methods.....	23	4	291	2,258	227	562	1,839	21,602	1,691	22,611	403	682	299	6,934
Mines with treatment plants:														
Open-pit and combination open-pit and underground.....	12	10	1,240	8,008	905	2,054	5,635	44,249	24,691	66,534	1,719	2,406	1,898	65,590
Underground:														
Open-stopping.....	4	4	2,055	16,391	1,512	3,509	12,409	57,389	40,002	92,343	2,147	5,048		
Other.....	3	2	162	1,199	138	324	1,067	5,112	3,988	8,764	52	336		
Treatment plants only.....	17	12	989	5,450	721	1,461	3,850	22,502	70,207	88,677	<sup>12</sup> 18	4,032	2,593 <sup>1</sup>	33,403
Nonproducing establishments.....	38	-	69	256	64	105	238	29	721	-	-	750	<sup>11</sup> 238	( <sup>13</sup> )
1099.—METALLIC ORES, N.E.C., TOTAL.....	25	2	165	1,006	130	216	677	1,598	2,020	3,034	(X)	584	<sup>11</sup> 237	<sup>11</sup> 1,847

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>General statistics for most States are not shown separately in this table in order to avoid disclosing figures for individual companies or because of the relatively small size of the statistics. Such States are shown below for 1963, with the number of establishments in each State (and in parentheses the number of employees or employment-size range).

SIC 1081, Metal Mining Services: Maine, 2 (0-4); Connecticut, 1 (20-49); New Jersey, 1 (5-9); Michigan, 2 (20-49); Minnesota, 5 (273); Missouri, 9 (24); Kansas, 1 (0-4); Virginia, 1 (0-4); North Carolina, 1 (10-19); Georgia, 1 (0-4); Tennessee, 2 (20-49); Arkansas, 1 (20-49); Texas, 3 (10-19); Montana, 2 (20-49); Idaho, 3 (9); Wyoming, 5 (138); Colorado, 12 (77); New Mexico, 1 (0-4); Arizona, 8 (1,029); Utah, 7 (192); Nevada, 7 (226); Washington, 3 (3); California, 5 (9).

SIC 1092, Mercury Ores: Idaho, 2 (0-4); Arizona, 3 (8); Utah, 2 (0-4); Nevada, 8 (80); Washington, 2 (0-4); Oregon, 5 (4); and Alaska, 2 (0-9).

SIC 1093, Titanium Ores: New York, 1 (250-499); New Jersey, 1 (100-249); Virginia, 1 (20-49); Florida, 4 (455); and Idaho, 1 (0-4).

SIC 1094, Uranium-Radium-Vanadium Ores: North Dakota, 6 (23); South Dakota, 20 (78); Texas, 7 (50-99); Idaho, 3 (20-49); Arizona, 14 (302); Nevada, 2 (0-4); Washington, 4 (55); Oregon, 1 (0-4); California, 7 (14); and Alaska, 1 (10-19).

SIC 1099, Metallic Ores, N.E.C.: Pennsylvania, 1 (0-4); Ohio, 1 (10-19); South Dakota, 1 (50-99); South Carolina, 1 (10-19); Montana, 1 (0-4); Idaho, 3 (0-4); Wyoming, 1 (0-4); Colorado, 8 (7); New Mexico, 2 (0-4); Arizona, 2 (0-4); Nevada, 1 (0-4); California, 1 (10-19); and Alaska, 2 (20-49).

<sup>2</sup>Represents production. For the Mercury Ores Industry represents flasks (76 pounds each) of mercury metal. For the Titanium Ores Industry, represents thousands of short tons of titanium (ilmenite and rutile) concentrates. For the Uranium-Radium-Vanadium Ores Industry, represents thousands of short tons of crude uranium-vanadium ores.

<sup>3</sup>Service establishments were permitted to prepare one report for all mining services performed in the United States. The totals shown for number of establishments in this table, and all figures shown for number of establishments in other tables of this report, represent the counts of these reports. However, these reports contained data for total receipts for services, total employment on March 15 and for 1963, capital expenditures by State and county. All other region and State information in this table for mining services establishments was obtained by allocating the totals reported by each company on the basis of the reported county data. The number of establishments shown by region and State in this table (except in footnote 1) represents the number of county operations in such regions and States.

<sup>4</sup>Figures for lode gold services are included with those for copper ores services.

<sup>5</sup>For 1963, represents establishments principally serving the following industries: Lode Gold, 2; Silver Ores, 4; Bauxite, 1; and Metallic Ores, N.E.C., 3.

<sup>6</sup>Excludes data for 2 establishments in Alaska with total employment in the range 10-19.

<sup>7</sup>Includes data for 2 establishments in Texas with local employment.



TABLE 3. Detailed Statistics for Selected Geographic Areas and Types of Operation: 1963

Item	1081.--Metal mining services					109.--Miscellaneous metal ores industries					
	All operations	Principal geographic area-- Mountain division		Principal industry served		Total	1092.-- Mercury ores industry	1093.-- Titanium ores industry	1094.--Uranium-radium- vanadium ores industry		
		All operations	Arizona	Copper ores services	Uranium- radium- vanadium ores services				United States	Mountain division	
										All opera- tions	Wyoming
Establishments, total.....number..	83	45	8	15	20	417	49	8	335	289	32
With 0 to 19 employees.....do....	66	34	5	9	15	354	46	1	284	241	19
With 20 to 99 employees.....do....	12	7	-	2	5	43	2	2	37	34	10
With 100 employees and over.....do....	5	4	3	4	-	20	1	5	14	14	3
Including mines.....do....	(X)	(X)	(X)	(X)	(X)	394	49	8	318	277	31
Including treatment plants.....do....	(X)	(X)	(X)	(X)	(X)	91	38	8	37	27	8
Quantity of primary products <sup>2</sup> .....do....	(X)	(X)	(X)	(X)	(X)	(X)	19,188	3901	6,383	6,147	1,419
Value of shipments and receipts.....\$1,000..	32,360	26,597	15,578	17,993	6,462	355,095	3,658	22,033	326,370	311,458	57,450
Resales and minerals transferred to other estab- lishments for treatment.....do....	3	3	2	3	-	89,584	-	-	326,370	82,916	10,612
Net shipments and receipts, total.....do....	32,357	26,594	15,576	17,990	6,462	265,511	3,658	22,033	326,370	228,542	46,838
Primary products or services.....do....	30,989	26,594	15,576	17,990	6,462	260,609	3,632	22,033	236,504	228,542	46,838
Other products and services <sup>4</sup> .....do....	1,368	-	-	-	-	4,902	26	-	(D)	-	-
Value added in mining.....do....	24,736	20,134	12,210	13,960	4,615	209,817	2,569	15,021	190,629	183,514	36,813
Persons in industry, total.....number..	2,242	1,728	1,032	1,370	276	9,061	344	997	6,957	6,674	1,037
Production, development, and exploration workers (average for year).....do....	1,891	1,482	918	1,148	243	6,369	279	846	5,114	4,921	783
January.....do....	1,781	1,531	899	1,133	320	7,179	257	844	5,961	5,759	911
February.....do....	1,704	1,446	874	1,103	259	6,918	272	838	5,691	5,486	875
March.....do....	1,799	1,465	864	1,098	294	6,765	301	839	5,512	5,338	822
April.....do....	1,841	1,465	890	1,122	242	6,395	279	848	5,118	4,922	826
May.....do....	1,843	1,414	849	1,081	234	6,429	280	860	5,139	4,958	836
June.....do....	1,889	1,545	986	1,170	230	6,253	249	873	4,969	4,771	767
July.....do....	2,154	1,518	1,079	1,305	216	6,149	259	870	4,861	4,703	750
August.....do....	2,063	1,591	1,023	1,251	233	6,205	263	861	4,940	4,743	756
September.....do....	2,048	1,590	1,029	1,254	210	6,067	232	849	4,828	4,652	750
October.....do....	2,014	1,562	1,040	1,263	199	6,091	238	841	4,865	4,672	748
November.....do....	1,864	1,464	938	1,164	215	6,049	257	822	4,860	4,645	721
December.....do....	1,882	1,549	1,029	1,234	29	5,879	238	828	4,700	4,515	727
Other employees.....do....	315	224	111	218	20	2,361	37	151	1,557	1,475	243
Proprietors and firm members.....do....	37	22	3	4	13	331	28	-	292	278	11
Performing manual labor.....do....	28	18	1	2	12	246	27	-	208	194	9
Man-hours worked by production, development, and exploration workers, total.....1,000..	4,018	3,224	1,953	2,458	592	13,798	610	1,721	11,251	10,843	1,960
At mines, total.....do....	(X)	(X)	(X)	(X)	(X)	9,152	462	915	7,655	7,548	1,277
Underground <sup>5</sup> .....do....	1,412	946	830	862	88	6,025	326	-	5,699	5,630	520
Open-pit <sup>6</sup> .....do....	1,012	945	559	562	373	1,530	69	553	832	792	531
Surface (including mine shops and yards) <sup>7</sup> .....do....	219	89	1	26	55	1,597	67	362	1,124	1,126	226
At treatment plants <sup>8</sup> .....do....	4,375	1,244	563	1,008	76	4,646	148	806	3,596	3,309	682
Man-hours spent on development and exploration work (included above).....do....	(X)	(X)	(X)	(X)	(X)	714	56	-	595	583	177
Principal expenses designated below, total.....\$1,000..	20,802	16,921	10,260	12,956	2,943	214,130	3,117	13,488	188,334	178,404	30,202
Wages of production, development, and exploration workers.....do....	11,485	9,456	5,936	7,062	1,834	41,540	1,562	5,131	34,170	33,129	5,574
Salaries of all other employees.....do....	2,438	1,782	946	1,790	161	19,316	277	1,270	11,049	10,473	1,643
Supplies <sup>9</sup> .....do....	5,209	4,244	2,616	3,230	426	47,308	791	3,761	41,747	40,677	6,677
Minerals received for treatment.....do....	(X)	(X)	(X)	(X)	(X)	82,263	-	-	81,636	116,834	10,612
Purchased fuels.....do....	1,204	1,016	526	587	391	3,981	135	479	3,253	3,065	425
Purchased electric energy.....do....	73	66	50	50	14	5,657	110	1,362	4,145	3,994	618
Contract or subcontract work.....do....	393	357	186	237	117	14,065	242	1,485	12,334	10,909	4,653
Purchased machinery installed.....do....	3,784	3,400	2,262	2,343	990	11,005	128	2,096	8,555	8,375	989
Capital expenditures, total.....do....	3,039	2,619	2,272	2,414	91	19,001	317	2,171	15,929	15,230	3,337
Development and exploration of mineral properties.....do....	(X)	(X)	(X)	(X)	(X)	4,847	136	-	4,401	4,105	2,211
Treatment plant and other construction.....do....	102	100	9	67	6	4,298	37	70	4,147	3,924	273
New machinery and equipment.....do....	2,682	2,358	2,147	2,231	70	7,075	81	2,098	4,687	4,571	516
Used plant and equipment.....do....	255	161	116	116	15	2,781	63	3	2,694	2,630	337
Energy used.....million kwh. equivalent..	315	273	130	143	46	2,862	54	377	2,386	2,285	291
Coal.....1,000 short tons..	(Z)	-	-	-	-	12	-	10	2	2	-
Distillate fuel oil.....1,000 barrels..	126	117	43	49	21	185	10	32	129	122	38
Residual fuel oil.....do....	1	(Z)	-	-	-	101	12	57	25	10	2
Gas.....million cu. ft..	10	-	-	-	-	5,302	-	3	5,296	5,202	463
Gasoline.....1,000 gallons..	1,525	1,135	944	944	146	1,834	35	213	1,546	1,546	373
Other fuels and undistributed <sup>10</sup> .....\$1,000..	153	125	88	99	16	432	20	-	398	324	49
Electric energy purchased.....million kwh..	2	2	1	1	1	465	9	131	322	308	54
Electric energy generated and used.....do....	(Z)	(Z)	-	-	-	47	(Z)	-	44	43	(Z)
Horsepower of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000..	185	167	70	82	38	537	19	61	434	419	97
Per production worker.....do....	98	113	76	71	156	85	68	79	85	85	124
Prime movers.....1,000..	182	166	69	81	37	361	13	27	306	294	83
Electric motors driven by purchased energy.....do....	3	1	1	1	1	176	6	34	128	125	14
Horsepower rating of electric motors driven by energy generated at establishments reported.....1,000 hp..	(Z)	(Z)	-	-	-	16	(Z)	-	15	15	(Z)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. (Z) Less than one-half of the unit of measure specified.

<sup>1</sup>Geographic area figures in this table are based on the classification of contractor reports according to the principal state in which the service was performed. <sup>2</sup>Represents production. For the Mercury Ores Industry, represents flasks (76 pounds each) of mercury metal. For the Titanium Ores Industry, represents thousands of short tons of titanium (ilmenite and rutile) concentrates. For the Uranium-Radium-Vanadium Ores Industry, represents thousands of short tons of crude uranium-vanadium ores.

<sup>3</sup>Includes production by industries other than Titanium Ores.

<sup>4</sup>Custom plants in the Uranium-Radium-Vanadium Ores and Metallic Ores, N.E.C. Industries received \$11,358 thousand for treatment on a custom or toll basis. These receipts are not included in the total value of shipments and receipts in order to avoid duplication since the value of custom concentrates shipped is already included in the total value of shipments.

TABLE 3. Detailed Statistics for Selected Geographic Areas and Types of Operation: 1963—Con.

Item	109.—Miscellaneous metal ores industries—continued										
	1094.—Uranium-radium-vanadium ores industry—continued										
	Mountain division—Continued			Mines only			Mines with treatment plants			Treat- ment plants only	1099.— Metallic ores, n.e.c., industry
	Colorado	New Mexico	Utah	Open-pit	Underground	Open-pit	Open-pit and combination open-pit and under- ground	Underground	Underground		
					All mining methods	Open- stopping		All mining methods	Open- stopping		
Establishments, total.....number...	123	26	89	43	213	190	12	7	4	17	25
With 0 to 19 employees.....do....	110	19	80	42	191	172	2	1	-	5	23
With 20 to 99 employees.....do....	9	2	7	1	20	16	6	2	-	8	2
With 100 employees and over.....do....	4	5	2	-	2	2	4	4	4	4	-
Including mines.....do....	119	24	86	43	213	190	12	7	4	-	19
Including treatment plants.....do....	7	6	3	-	-	-	12	7	4	17	8
Quantity of primary products <sup>2</sup> .....	1,109	2,625	672	508	1,929	1,526	1,719	2,199	2,147	418	(X)
Value of shipments and receipts.....\$1,000..	60,871	105,260	79,758	6,760	62,935	40,324	66,534	101,107	92,343	38,677	3,034
Resales and minerals transferred to other estab- lishments for treatment.....do....	19,213	105,260	79,758	-	8	8	6,824	101,107	92,343	54,285	3,034
Net shipments and receipts, total.....do....	41,658	(D)	(D)	6,760	62,927	40,316	59,710	76,028	70,297	34,392	(D)
Primary products or services.....do....	41,658	(D)	(D)	6,760	62,554	39,943	59,710	76,028	70,297	34,392	(D)
Other products and services <sup>4</sup> .....do....	-	(D)	127	-	373	373	-	-	(D)	-	(D)
Value added in mining.....do....	30,022	72,340	40,422	5,594	55,499	33,898	44,249	62,501	57,389	22,502	1,598
Persons in industry, total.....number...	1,866	2,472	957	150	2,099	1,798	1,244	2,219	2,057	990	176
Production, development, and exploration workers (average for year).....do....	1,386	1,827	638	101	1,663	1,436	905	1,650	1,512	721	130
January.....do....	1,695	2,150	668	112	1,909	1,700	959	2,020	1,840	877	117
February.....do....	1,692	1,919	661	108	1,921	1,716	920	1,787	1,620	872	117
March.....do....	1,654	1,902	660	100	1,825	1,605	896	1,755	1,588	863	113
April.....do....	1,426	1,830	640	84	1,745	1,507	921	1,690	1,529	804	150
May.....do....	1,369	1,824	652	94	1,677	1,444	930	1,669	1,514	703	150
June.....do....	1,301	1,823	656	94	1,583	1,426	941	1,640	1,514	556	162
July.....do....	1,264	1,790	671	81	1,632	1,389	862	1,621	1,495	598	159
August.....do....	1,260	1,816	627	91	1,600	1,356	906	1,619	1,496	658	141
September.....do....	1,242	1,791	635	90	1,617	1,388	865	1,597	1,479	574	158
October.....do....	1,271	1,779	649	105	1,629	1,410	861	1,588	1,470	570	147
November.....do....	1,256	1,768	613	114	1,543	1,333	886	1,558	1,449	662	110
December.....do....	1,248	1,748	567	99	1,608	1,395	838	1,537	1,422	503	113
Other employees.....do....	354	606	227	16	217	153	335	567	543	268	35
Proprietors and firm members.....do....	126	39	92	33	219	209	4	2	2	1	11
Performing manual labor.....do....	92	21	62	31	154	148	4	2	2	-	11
Man-hours worked by production, development, and exploration workers, total.....1,000..	2,826	4,200	1,313	213	3,568	3,022	2,054	3,833	3,509	1,461	216
At mines, total.....do....	1,919	3,147	846	213	3,568	3,017	894	2,859	2,703	-	120
Underground <sup>5</sup> .....do....	1,711	2,350	770	-	3,167	2,673	61	2,373	2,252	-	-
Open-pit <sup>6</sup> .....do....	80	127	9	188	-	-	639	-	-	-	-
Surface (including mine shops and yards) <sup>7</sup> .....do....	128	670	67	25	401	349	194	486	446	-	44
At treatment plants <sup>8</sup> .....do....	906	1,053	467	-	-	-	1,160	974	811	1,461	96
Man-hours spent on development and exploration work (included above).....do....	207	58	110	29	425	249	23	79	56	7	63
Principal expenses designated below, total.....\$1,000..	42,538	52,853	45,293	2,044	20,692	16,828	31,825	57,521	52,440	73,898	2,800
Wages of production, development, and exploration workers.....do....	7,663	14,821	3,740	557	10,337	8,498	5,635	13,476	12,409	3,850	677
Salaries of all other employees.....do....	2,420	4,449	1,596	105	1,552	1,133	2,373	4,114	3,982	1,600	329
Supplies <sup>9</sup> .....do....	10,163	29,049	37,526	213	4,728	3,777	7,923	18,035	17,316	10,619	1,009
Minerals received for treatment.....do....	19,213	-	-	-	-	-	10,035	17,316	31,772	54,285	627
Purchased fuels.....do....	1,011	1,002	408	135	482	415	554	1,049	959	998	114
Purchased electric energy.....do....	1,081	1,650	503	15	731	619	739	1,772	1,639	884	40
Contract or subcontract work.....do....	987	1,882	1,520	1,019	2,862	2,386	4,566	1,759	1,679	1,612	4
Purchased machinery installed.....do....	1,274	4,749	726	418	1,252	1,167	874	4,059	3,953	1,759	226
Capital expenditures, total.....do....	2,877	5,412	1,347	634	2,617	1,935	2,406	5,384	5,048	4,032	584
Development and exploration of mineral properties.....do....	632	613	507	177	1,280	705	1,620	714	531	8	310
Treatment plant and other construction.....do....	944	1,140	98	19	179	161	245	638	573	3,007	44
New machinery and equipment.....do....	613	2,969	436	203	825	739	369	2,990	2,914	218	209
Used plant and equipment.....do....	688	690	306	235	333	330	172	1,042	1,030	799	21
Energy used.....million kwh. equivalent..	805	813	314	36	179	148	345	860	779	959	45
Coal.....1,000 short tons.....	-	-	2	-	-	-	-	-	-	2	-
Distillate fuel oil.....1,000 barrels.....	20	44	14	6	35	31	41	38	32	9	14
Residual fuel oil.....do....	6	1	(2)	-	2	2	14	-	-	8	7
Gas.....million cu. ft.....	2,122	1,908	677	-	113	71	479	2,101	1,912	2,603	3
Gasoline.....1,000 gallons.....	456	355	198	57	648	503	358	384	332	99	40
Other fuels and undistributed <sup>10</sup> .....\$1,000..	64	27	67	95	61	70	102	3	3	106	14
Electric energy purchased.....million kwh..	74	129	44	1	41	34	63	134	123	83	3
Electric energy generated and used.....do....	1	36	3	(2)	4	2	5	29	29	5	3
Horsepower of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000..	107	122	71	19	102	85	111	124	114	72	23
Per production worker.....do....	77	67	111	188	61	59	123	75	75	100	177
Prime movers.....1,000.....	71	84	38	18	73	63	90	87	80	34	15
Electric motors driven by purchased energy.....do....	36	38	33	1	29	22	37	34	34	38	8
Horsepower rating of electric motors driven by energy generated at establishments reported.....1,000 hp..	(2)	14	(2)	(2)	1	1	2	11	11	1	1

<sup>2</sup>For metal mining services industries, represents man-hours on exploration work, including geophysical and other exploratory surveying.<sup>3</sup>For metal mining services industries, represents man-hours on stripping overburden.<sup>4</sup>For metal mining services industries, represents man-hours on mining minerals for the account of others.<sup>5</sup>For metal mining services industries, represents man-hours on other services, such as sinking mine shafts, driving mine tunnels, and drilling.<sup>6</sup>Includes the cost of products bought and resold without further processing.<sup>10</sup>Undistributed fuels costs were as follows: for Industry 1081, \$47 thousand; for Industry Group 109, \$172 thousand; for Industry 1092, \$16 thousand; for Industry 1093, \$147 thousand; and for Industry 1099, \$9 thousand.

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963

Industry and item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees or more
INDUSTRY 1081.—METAL MINING SERVICES											
Establishments.....number..	83	49	13	4	10	2	2	3	-	-	-
All employees:											
Total.....do....	2,206	91	84	58	327	<u>567</u>	(D)	1,079	-	-	-
Payroll.....\$1,000..	13,923	376	336	269	2,272	<u>3,433</u>	(D)	7,237	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,891	84	69	51	267	<u>515</u>	(D)	905	-	-	-
Man-hours.....1,000..	4,018	169	122	87	564	<u>1,146</u>	(D)	1,930	-	-	-
Wages.....\$1,000..	11,485	357	239	229	1,786	<u>3,001</u>	(D)	5,873	-	-	-
Value added in mining.....do....	24,736	986	1,201	632	3,967	<u>5,874</u>	(D)	12,076	-	-	-
Value of shipments and receipts.....do....	32,360	1,245	1,395	748	5,365	<u>8,191</u>	(D)	15,416	-	-	-
Capital expenditures.....do....	3,039	154	99	25	250	<u>226</u>	(D)	2,255	-	-	-
Establishments by principal industry served:											
Iron ores services.....number..	14	7	3	1	2	-	1	-	-	-	-
Copper ores services.....do....	15	8	1	-	2	-	1	3	-	-	-
Lead and zinc ores services.....do....	24	18	3	1	1	1	-	-	-	-	-
Lode gold services.....do....	2	1	1	-	-	-	-	-	-	-	-
Silver ores services.....do....	4	4	-	-	-	-	-	-	-	-	-
Bauxite services.....do....	1	-	-	-	1	-	-	-	-	-	-
Uranium-radium-vanadium ores services.....do....	20	8	5	2	4	1	-	-	-	-	-
Metallic ores, n.e.c. services.....do....	3	3	-	-	-	-	-	-	-	-	-
INDUSTRY 1092.—MERCURY ORES											
Establishments.....number..	49	40	5	1	1	1	1	-	-	-	-
All employees:											
Total.....do....	316	30	32	<u>254</u>	(D)	(D)	(D)	-	-	-	-
Payroll.....\$1,000..	1,839	104	138	<u>1,597</u>	(D)	(D)	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	279	25	27	<u>227</u>	(D)	(D)	(D)	-	-	-	-
Man-hours.....1,000..	610	49	50	<u>511</u>	(D)	(D)	(D)	-	-	-	-
Wages.....\$1,000..	1,562	88	131	<u>1,343</u>	(D)	(D)	(D)	-	-	-	-
Value added in mining.....do....	2,569	180	162	<u>2,227</u>	(D)	(D)	(D)	-	-	-	-
Value of shipments and receipts.....do....	3,658	219	166	<u>3,273</u>	(D)	(D)	(D)	-	-	-	-
Capital expenditures.....do....	317	49	119	<u>149</u>	(D)	(D)	(D)	-	-	-	-
Producing establishments, by type of operation,											
total.....number..	32	25	3	1	1	1	1	-	-	-	-
Open-pit mines:											
Without treatment plants.....do....	3	3	-	-	-	-	-	-	-	-	-
With treatment plants.....do....	23	20	2	-	1	-	-	-	-	-	-
Combination open-pit and underground mines											
with treatment plants.....do....	3	1	-	1	-	-	1	-	-	-	-
Underground mines with treatment plants.....do....	3	1	1	-	-	1	-	-	-	-	-
INDUSTRY 1093.—TITANIUM ORES											
Establishments.....number..	8	1	-	-	2	-	4	1	-	-	-
All employees:											
Total.....do....	997	<u>52</u>	-	-	(D)	-	<u>945</u>	(D)	-	-	-
Payroll.....\$1,000..	6,401	<u>6,401</u>	-	-	(D)	-	(D)	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	846	<u>45</u>	-	-	(D)	-	<u>801</u>	(D)	-	-	-
Man-hours.....1,000..	1,721	<u>1,721</u>	-	-	(D)	-	(D)	(D)	-	-	-
Wages.....\$1,000..	5,131	<u>5,131</u>	-	-	(D)	-	(D)	(D)	-	-	-
Value added in mining.....do....	15,021	<u>15,021</u>	-	-	(D)	-	(D)	(D)	-	-	-
Value of shipments and receipts.....do....	22,033	<u>22,033</u>	-	-	(D)	-	(D)	(D)	-	-	-
Capital expenditures.....do....	2,171	<u>2,171</u>	-	-	(D)	-	(D)	(D)	-	-	-
Producing establishments by type of operation											
(open-pit mines with treatment plants).....number..	8	1	-	-	2	-	4	1	-	-	-
INDUSTRY 1094.—URANIUM-RADIUM-VANADIUM ORES											
Establishments.....number..	335	218	41	25	18	19	9	3	2	-	-
All employees:											
Total.....do....	16,665	285	275	365	550	1,323	1,311	<u>2,413</u>	(D)	-	-
Payroll.....\$1,000..	145,219	1,213	1,372	2,393	3,299	8,179	8,785	<u>18,691</u>	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	5,114	269	242	318	459	1,037	1,015	<u>1,774</u>	(D)	-	-
Man-hours.....1,000..	11,251	505	499	750	921	2,194	2,313	<u>4,069</u>	(D)	-	-
Wages.....\$1,000..	34,170	1,158	1,234	2,137	2,670	6,242	6,720	<u>14,009</u>	(D)	-	-

See footnotes at end of table.

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963—Continued

Industry and item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees or more
INDUSTRY 1094.—URANIUM-RADIUM-VANADIUM ORES—Continued											
Value added in mining.....\$1,000..	190,629	10,972	3,882	9,178	24,638	32,121	40,692	<u>69,146</u>	(D)	-	-
Value of shipments and receipts.....do....	326,370	13,508	5,364	11,761	29,277	60,385	100,432	<u>105,643</u>	(D)	-	-
Capital expenditures.....do....	15,929	1,496	1,002	471	2,252	2,692	2,845	<u>2,171</u>	(D)	-	-
Producing establishments by type of operation, total.....number..	297	185	36	25	18	19	9	3	2	-	-
Open-pit mines:											
Without treatment plants.....do....	43	38	2	2	1	-	-	-	-	-	-
With treatment plants.....do....	9	2	-	-	1	4	2	-	-	-	-
Combination open-pit and underground mines:											
Without treatment plants.....do....	5	4	1	-	-	-	-	-	-	-	-
With treatment plants.....do....	3	-	-	-	-	1	1	1	-	-	-
Underground mines, by mining method:											
Without treatment plants:											
Open-stopping.....do....	190	130	26	16	10	6	2	-	-	-	-
Shrinkage stopping.....do....	1	-	-	1	-	-	-	-	-	-	-
Square setting.....do....	5	3	-	-	1	1	-	-	-	-	-
Cut-and-fill stopping.....do....	5	3	1	1	-	-	-	-	-	-	-
Block caving.....do....	2	-	2	-	-	-	-	-	-	-	-
Sublevel caving, top slicing, and other.....do....	10	5	1	2	2	-	-	-	-	-	-
With treatment plants:											
Open-stopping.....do....	4	-	-	-	-	-	-	2	2	-	-
Shrinkage stopping.....do....	1	-	-	-	-	1	-	-	-	-	-
Sublevel caving, top slicing, and other.....do....	2	-	-	1	-	1	-	-	-	-	-
Treatment plants only.....do....	17	-	3	2	3	5	4	-	-	-	-
INDUSTRY 1099.—METALLIC ORES, N.E.C.											
Establishments.....number..	25	20	-	3	1	1	-	-	-	-	-
All employees:											
Total.....do....	165	19	-	<u>146</u>	(D)	(D)	-	-	-	-	-
Payroll.....\$1,000..	1,006	79	-	<u>927</u>	(D)	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	130	18	-	<u>112</u>	(D)	(D)	-	-	-	-	-
Man-hours.....1,000..	216	33	-	<u>183</u>	(D)	(D)	-	-	-	-	-
Wages.....\$1,000..	677	78	-	<u>599</u>	(D)	(D)	-	-	-	-	-
Value added in mining.....do....	1,598	101	-	<u>1,497</u>	(D)	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	3,034	120	-	<u>2,914</u>	(D)	(D)	-	-	-	-	-
Capital expenditures.....do....	584	75	-	<u>509</u>	(D)	(D)	-	-	-	-	-
Producing establishments by type of operation, total.....number..	9	5	-	3	1	-	-	-	-	-	-
Open-pit mines:											
Without treatment plants.....do....	1	1	-	-	-	-	-	-	-	-	-
With treatment plants.....do....	2	-	-	1	1	-	-	-	-	-	-
Treatment plants only.....do....	6	4	-	2	-	-	-	-	-	-	-

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.

n.e.c. Not elsewhere classified.

<sup>1</sup>Includes figures for separately reported central offices and related facilities. These were not distributed by employment size.

**TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts,  
and Net Shipments of Primary Products: 1963 and 1958**

(In thousands of dollars)

Ind. code	Industry and year	Value of shipments and receipts of establishments classified in the industry					Value of net shipments of primary products of the industry shipped by establishments in all industries or receipts for primary services by all industries		
		Total	Primary products or services	Secondary products	Receipts for secondary services	Products pur- chased and resold without further processing	Total (produced or performed in all industries)	Produced or performed in this industry	Produced or performed in other industries
1081	Metal mining services.....1963.. 1958..	32,360 32,384	30,989 (D)	(D) -	(D) (D)	3 -	31,082 32,263	30,989 (D)	93 (D)
1092	Mercury ores.....1963.. 1958 <sup>2</sup> ..	3,658 8,607	3,632 (D)	- -	26 (D)	- (D)	<sup>1</sup> 3,592 <sup>1</sup> 8,402	<sup>1</sup> 3,592 <sup>1</sup> 8,402	- -
1093	Titanium ores.....1963.. 1958..	22,033 17,158	(D) (D)	(D) (D)	- (D)	- (D)	<sup>3</sup> 16,836 <sup>3</sup> 12,365	(D) (D)	(D) (D)
1094	Uranium-radium-vanadium ores.....1963.. 1958..	326,370 336,451	318,140 (D)	(D) (D)	(D) 1,475	(D) -	236,504 224,931	236,504 (D)	- (D)
1099	Metallic ores, n.e.c.....1963.. 1958 <sup>2</sup> ..	3,034 3,018	(D) 2,940	(D) 78	(D) -	(D) -	4,532 3,551	(D) (D)	(D) (D)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.

<sup>1</sup>Represents gross shipments of mercury metal.

<sup>2</sup>Excludes data for Alaska.

<sup>3</sup>Represents gross shipments of titanium concentrates.

**TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958**

Type of service and geographic area		Total receipts for services (\$1,000)	
		1963	1958
METAL MINING SERVICES			
United States, total.....		31,082	32,263
Exploration work, including geophysical and other exploratory surveying.....		7,498	2,215
Prospect and test drilling.....		7,955	11,523
Other drilling, including blasting.....		101	<sup>1</sup> 621
Sinking mine shafts and driving mine tunnels.....		3,181	7,018
Stripping overburden.....		6,574	5,128
Mining minerals for others.....		5,773	<sup>2</sup> 5,758
East and South <sup>3</sup> .....		5,393	9,920
Prospect and test drilling.....		2,962	4,232
West <sup>3</sup> .....		25,689	22,343
Prospect and test drilling.....		4,993	7,291
Arizona <sup>3</sup> .....		14,686	(NA)

Product and geographic area	Unit of measure	1963			1958		
		Total production (quantity)	Total shipments (including interplant transfers) or receipts of minerals		Total production (quantity)	Total shipments (including interplant transfers) or receipts of minerals	
			Quantity	Value \$1,000		Quantity	Value \$1,000
MERCURY ORES							
United States, total:							
Production and shipments:							
Crude mercury ore.....	Short tons.....	118,737	(D)	(D)	<sup>4</sup> 399,543	(D)	(D)
Mercury metal.....	Flasks (76 lbs.)	19,188	18,838	3,613	<sup>4</sup> 33,812	<sup>4</sup> 37,144	<sup>5</sup> 8,402
Minerals treated.....	Short tons.....	118,331	-	-	<sup>6</sup> 395,631	( <sup>6</sup> )	(D)
TITANIUM ORES							
United States, total:							
Production and shipments:							
Crude titanium ores mined.....	1,000 short tons	25,720	-	-	13,244	-	-
Titanium concentrates, total.....	Short tons.....	901,250	902,172	16,836	605,522	597,523	12,365
Ilmenite concentrates.....	do.....	888,883	889,371	15,583	595,265	591,464	11,590
Rutile concentrates.....	do.....	12,367	12,801	1,253	10,257	6,059	775
Minerals treated.....	1,000 short tons	25,720	-	-	<sup>6</sup> 13,169	( <sup>6</sup> )	(D)
See footnotes at end of table.							

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	Unit of measure	1963			1958		
		Total production (quantity)	Total shipments (including interplant transfers) or receipts of minerals		Total production (quantity)	Total shipments (including interplant transfers) or receipts of minerals	
			Quantity	Value (\$1,000)		Quantity	Value (\$1,000)
URANIUM-RADIUM-VANADIUM ORES							
United States, total:							
Production and shipments:							
Crude uranium-vanadium ores.....	1,000 short tons	6,382.9	2,806.2	77,048	5,480.2	3,621.8	91,303
From underground operations.....	..do.....	4,226.8	(X)	(X)	3,129.8	(X)	(X)
From open-pit operations.....	..do.....	2,156.1	(X)	(X)	2,350.4	(X)	(X)
Uranium-vanadium concentrates <sup>7</sup> .....	..do.....	110.4	107.0	241,092	58.5	58.7	243,080
Minerals treated.....	..do.....	3,548.9	2,854.8	81,636	1,533.9	4,432.5	109,452
East and South:							
Production and shipments:							
Crude uranium-vanadium ores.....	..do.....	156.4	130.8	1,424	37.2	37.2	565
From underground operations.....	..do.....	7.2	(X)	(X)	33.9	(X)	(X)
From open-pit operations.....	..do.....	149.2	(X)	(X)	3.3	(X)	(X)
Mountain:							
Production and shipments:							
Crude uranium-vanadium ores.....	..do.....	6,147.2	2,732.5	74,306	5,271.6	3,569.5	90,372
Uranium-vanadium concentrates <sup>7</sup> .....	..do.....	108.6	108.4	229,103	(NA)	(NA)	(NA)
Minerals treated.....	..do.....	3,401.5	2,545.7	76,375	(D)	4,138.1	105,300
Wyoming:							
Production and shipments:							
Crude uranium-vanadium ores.....	..do.....	1,418.9	603.1	12,396	612.0	541.5	10,314
From underground operations.....	..do.....	274.2	(X)	(X)	24.4	(X)	(X)
From open-pit operations.....	..do.....	1,144.7	(X)	(X)	587.6	(X)	(X)
Uranium-vanadium concentrates <sup>7</sup> .....	..do.....	69.8	69.8	45,054	(NA)	(NA)	(NA)
Minerals treated.....	..do.....	848.0	491.5	10,612	(NA)	(NA)	(NA)
Colorado:							
Production and shipments:							
Crude uranium-vanadium ores.....	..do.....	1,109.2	580.8	15,003	836.0	794.1	18,623
Uranium-vanadium concentrates <sup>7</sup> .....	..do.....	8.5	8.4	45,722	30.3	30.9	69,069
Minerals treated.....	..do.....	( <sup>8</sup> )	<sup>8</sup> 1,210.6	19,213	-	1,423.1	31,413
New Mexico:							
Production and shipments:							
Crude uranium-vanadium ores.....	..do.....	2,624.9	607.4	12,227	2,196.2	705.2	9,952
Uranium-vanadium concentrates <sup>7</sup> .....	..do.....	6.6	6.6	85,257	4.6	4.5	67,200
Minerals treated.....	..do.....	<sup>6</sup> 2,417.2	( <sup>6</sup> )	(D)	1,310.3	687.0	14,903
Arizona:							
Production and shipments:							
Crude uranium-vanadium ores.....	..do.....	243.5	134.9	4,122	221.5	222.5	6,864
Utah:							
Production and shipments:							
Crude uranium-vanadium ores.....	..do.....	671.8	727.6	(D)	1,402.7	1,303.0	44,565
From underground operations.....	..do.....	665.6	(X)	(X)	1,270.7	(X)	(X)
From open-pit operations.....	..do.....	6.2	(X)	(X)	132.0	(X)	(X)
Pacific:							
Production and shipments:							
Crude uranium-vanadium ores.....	..do.....	156.8	21.6	1,499	171.4	15.1	366
METALLIC ORES, N.E.C.							
Zirconium concentrates.....	Short tons.....	78,279	78,810	3,465	36,458	40,734	1,678
Antimony, beryllium, germanium, bastnaesite, monazite, and thorium concentrates, and platinum group metals <sup>9</sup> .....	.....	(X)	(X)	1,694	(X)	(X)	<sup>3</sup> 3,620

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Includes figures for other services primary to the metal mining services industry.<sup>2</sup>Represents strip mining minerals for others only.<sup>3</sup>Geographic area figures in this table are based on the classification of contractor reports according to the principal State in which services were performed. Hence, all services by each contractor are, in general, assigned to the geographic area in which the principal services were performed.<sup>4</sup>Excludes figures for Alaska. The Bureau of Mines showed production of 3,380 flasks of mercury in Alaska.<sup>5</sup>The value of mercury metal produced in Alaska is excluded from the figure for mercury metal and included with the value of antimony, beryllium, etc.<sup>6</sup>The figures for minerals received from other establishments for treatment are combined with those for minerals produced and treated at the same establishment. For mercury ore in the United States, the quantity of minerals received from others represents less than 20 percent of the figure shown.<sup>7</sup>Concentrates include lignite ash valued for its uranium content, slurry, and low-grade concentrates shipped to mills for further upgrading.<sup>8</sup>The quantity figure for minerals mined and treated in the same establishment is included with the quantity figure for minerals received from other establishments for treatment.<sup>9</sup>No thorium concentrates were reported produced in 1963 and no germanium concentrates in 1958.

**TABLE 6B. Product Classes—Indexes of Production and Unit Value for Primary Products Shipped by All Producers: 1963 and 1958**

Product code	Product and year	Indexes (1954 = 100)	
		Production	Unit value
109-	Miscellaneous metal ores.....1963..	491	79
	.....1958..	441	93
1092	Mercury ores.....1963..	90	81
	.....1958..	193	95
1093	Titanium ores.....1963..	168	119
	.....1958..	109	135
1094	Uranium-radium-vanadium ores.....1963 <sup>1</sup> .	679	71
	.....1958..	<sup>2</sup> 600	<sup>1</sup> 85
1099	Metallic ores, n.e.c.....1963..	260	85
	.....1958..	285	80

<sup>1</sup>Based on U<sub>3</sub>O<sub>8</sub> content of concentrates as reported by the Bureau of Mines. For 1958, the index represents approximately the period 1956 to 1958.

<sup>2</sup>Based on production of crude ore.

**TABLE 6C. Shipments of Primary Products Distributed by Unit Value: 1963**

Product and average value per unit f.o.b. mine or plant <sup>1</sup>	Quantity shipped		Value of shipments	
	Quantity	Percent of total quantity	Value	Percent of total value
	(1,000 short tons)		(\$1,000)	
Crude uranium-vanadium ores....	2806.2	100.0	77,048	100.0
Less than \$11.19.....	187.5	6.6	1,459	1.9
\$11.20 to \$14.19.....	227.3	8.1	2,881	3.7
\$14.20 to \$15.99.....	300.1	10.7	4,479	5.8
\$16.00 to \$17.99.....	305.5	10.9	5,091	6.6
\$18.00 to \$20.49.....	361.9	12.8	6,849	8.9
\$20.50 to \$22.99.....	268.0	9.6	5,903	7.7
\$23.00 to \$25.99.....	126.0	4.5	3,086	4.0
\$26.00 to \$29.49.....	172.8	6.2	4,767	6.2
\$29.50 to \$33.49.....	64.3	2.3	2,029	2.6
\$33.50 to \$37.99.....	126.2	4.5	4,551	5.9
\$38.00 to \$40.99.....	164.9	5.9	6,491	8.4
\$41.00 to \$54.49.....	255.3	9.1	12,160	15.8
\$54.50 to \$61.49.....	164.9	5.9	9,234	12.0
\$61.50 and over.....	81.5	2.9	8,065	10.5
Uranium-vanadium concentrates..	107.0	100.0	241,092	100.0
Less than \$4,300.....	92.8	86.7	29,439	12.2
\$11,900 to \$14,500.....	7.5	7.0	103,546	42.9
\$15,900 to \$18,000.....	6.7	6.3	108,107	44.9

<sup>1</sup>Represents value per short ton. The "average values" are based on the entire shipments of the specified product by each establishment. Thus they are representative of varied average prices among establishments but not of variations within an establishment.

TABLE 7A. Supplies Used, by Geographic Areas: 1963 and 1958

Supplies used and geographic area	Unit of measure	1963		1958	
		Quantity	Cost	Quantity	Cost
			(\$1,000)		(\$1,000)
GROUP 109—MISCELLANEOUS METAL ORES					
Supplies used, total.....	(X)	147,108	(X)	162,854	
Explosives.....	1,000 lbs.....	11,829	1,854	14,428	
Steel mill shapes and forms.....	short tons.....	11,966	4,492	6,330	
All other supplies.....	(X)	139,686	(X)	157,543	
Undistributed.....	(X)	1,076	(X)	1,967	
Industry 1094—Uranium-radium-vanadium ores					
<u>Geographic area</u>					
Mountain:					
Supplies used, total.....	(X)	141,747	(X)	55,262	
Explosives.....	1,000 lbs.....	7,307	1,358	11,792	
Steel mill shapes and forms.....	short tons.....	7,382	2,116	4,777	
All other supplies.....	(X)	137,757	(X)	51,365	
Undistributed.....	(X)	516	(X)	1,314	
Wyoming:					
Supplies used, total.....	(X)	6,677	(X)	(NA)	
Explosives.....	1,000 lbs.....	636	128	(NA)	
Steel mill shapes and forms.....	short tons.....	724	380	(NA)	
All other supplies.....	(X)	6,158	(X)	(NA)	
Undistributed.....	(X)	11	(X)	(NA)	
Colorado:					
Supplies used, total.....	(X)	10,163	(X)	23,772	
Explosives.....	1,000 lbs.....	1,352	222	2,523	
Steel mill shapes and forms.....	short tons.....	455	152	1,871	
All other supplies.....	(X)		(X)	22,523	
Undistributed.....	(X)	9,789	(X)	472	
New Mexico:					
Supplies used, total.....	(X)	29,049	(X)	12,248	
Explosives.....	1,000 lbs.....	4,152	802	5,594	
Steel mill shapes and forms.....	short tons.....	5,740	1,419	1,993	
All other supplies.....	(X)	8,429	(X)	11,055	
Undistributed.....	(X)	69	(X)	179	
Utah:					
Supplies used, total.....	(X)	37,526	(X)	14,352	
Explosives.....	1,000 lbs.....	802	152	2,466	
Steel mill shapes and forms.....	short tons.....	428	152	710	
All other supplies.....	(X)	37,014	(X)	13,328	
Undistributed.....	(X)	208	(X)	466	

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies.  
(NA) Not available. (X) Not applicable.

<sup>1</sup>Includes the cost of products purchased for resale without further processing.

<sup>2</sup>Includes the cost of minerals received from other establishments for treatment and the cost of purchases for resale without further processing.

<sup>3</sup>Includes the cost of minerals received from other establishments for treatment.



TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas: 1963 and 1954

Ind. code	Industry and geographic area	Aggregate horsepower per production worker		1963 (1,000 hp.)									
				Aggregate horsepower (prime movers and electric motors driven by purchased energy)					Prime movers (horsepower)				
		1963	1954	Total	By type of equipment					Total	By type of equipment		
					Loading equipment	Transportation equipment		All other equipment	Loading equipment		Transportation equipment		All other equipment
						Highway type	Other				Highway type	Other	
1001	METAL MINING SERVICES.....	98	53	185	27	107	23	28	182	27	107	23	25
	Principal Geographic Area <sup>1</sup>												
	Mountain, total.....	113	54	167	24	99	20	24	166	24	99	20	23
	Arizona.....	76	32	70	4	43	12	11	69	4	43	12	10
	Principal Industry Served												
	Copper ores services.....	71	<sup>2</sup> 37	82	6	45	16	15	81	6	45	16	14
	Uranium-radium-vanadium ores services	156	(NA)	38	20	9	5	4	37	20	9	5	3
1092	MERCURY ORES.....	63	31	19	1	5	3	10	13	1	5	3	4
1093	TITANIUM ORES.....	72	81	61	3	12	10	36	27	2	12	10	3
1094	URANIUM-RADIUM-VANADIUM ORES.....	85	56	434	73	135	55	171	306	70	135	45	55
	Geographic Area												
	Mountain, total.....	85	56	419	70	129	54	166	294	68	129	43	54
	Wyoming.....	124	(NA)	97	34	21	19	23	83	34	21	18	10
	Colorado.....	77	52	107	10	39	13	45	71	10	39	12	10
	New Mexico.....	67	37	122	18	37	12	55	84	16	37	7	24
	Utah.....	111	70	71	5	20	9	37	38	4	20	6	8
	Selected Types of Producing Operations												
	Mines only:												
	Open-pit.....	188	( <sup>3</sup> )	19	6	6	5	2	18	6	6	5	1
	Underground.....	61	( <sup>4</sup> )	102	13	32	17	40	73	12	32	14	15
	Open-stopping.....	59	(NA)	85	12	27	13	33	63	11	27	12	13
	Mines with treatment plants:												
	Open-pit and combination open-pit and underground.....	123	<sup>3</sup> 60	111	32	28	18	33	90	32	28	18	12
	Underground.....	75	<sup>4</sup> 63	124	15	45	11	53	87	14	45	7	21
	Open-stopping.....	75	(NA)	114	14	41	10	49	80	13	41	6	20
	Treatment plants only.....	100	31	72	5	23	2	42	34	5	23	2	4
1099	METALLIC ORES, N.E.C.....	177	( <sup>5</sup> )	23	4	3	6	10	15	1	3	6	5

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
 (U) Less than one-half of the unit of measure specified.

<sup>1</sup>Not elsewhere classified.

<sup>2</sup>Geographic area figures in this table are based on the classification of contractor reports according to the principal State in which the service was performed.

<sup>3</sup>Represents copper ores and gold services.

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas:  
1963 and 1954—Continued

Ind. code	Industry and geographic area	1963 (1,000 hp.)—Continued							
		Prime movers (horsepower)— Continued		Electric motors (horsepower)					
		By use		Total	By type of equipment			By source of power	
		Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated at same establishment
1081	METAL MINING SERVICES.....	4	178	3	-	-	3	3	(2)
	<u>Principal Geographic Area</u> <sup>1</sup>								
	Mountain, total.....	4	162	1	-	-	1	1	(2)
	Arizona.....	2	67	1	-	-	1	1	(2)
	<u>Principal Industry Served</u>								
	Copper ores services.....	3	78	1	-	-	1	1	-
	Uranium-radium-vanadium ores services	-	37	1	-	-	1	1	-
1092	MERCURY ORES.....	2	11	6	(2)	(2)	6	6	(2)
1093	TITANIUM ORES.....	-	27	34	1	-	33	34	-
1094	URANIUM-RADIUM-VANADIUM ORES.....	42	264	143	5	11	127	128	15
	<u>Geographic Area</u>								
	Mountain, total.....	41	253	140	5	11	124	125	15
	Wyoming.....	12	71	14	(2)	1	13	14	(2)
	Colorado.....	1	70	36	(2)	1	35	36	(2)
	New Mexico.....	24	60	52	4	6	42	38	14
	Utah.....	2	36	33	(2)	3	30	33	(2)
	<u>Selected Types of Producing Operations</u>								
	Mines only:								
	Open-pit.....	1	17	1	-	(2)	1	1	(2)
	Underground.....	7	66	30	1	5	24	29	1
	Open-stopping.....	6	57	23	1	2	20	22	1
	Mines with treatment plants:								
	Open-pit and combination open-pit and underground.....	13	77	23	(2)	(2)	23	21	2
	Underground.....	20	67	48	3	5	40	37	11
	Open-stopping.....	19	61	45	3	5	37	34	11
	Treatment plants only.....	1	33	39	-	-	39	38	1
1099	METALLIC ORES, N.E.C.....	4	11	9	3	-	6	8	1

<sup>2</sup>Figures for open-pit and combination open-pit and underground mines only are included with those for such mines with treatment plants.<sup>4</sup>Figures for underground mines only are included with those for such mines with treatment plants.<sup>5</sup>Not shown since the number of proprietors and firm members performing manual labor exceeds one-third of the number of production, development, and exploration workers.

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with an average of—						
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
INDUSTRY 1081.—METAL MINING SERVICES								
Establishments.....number..	83	76	2	2	3	-	-	-
Reporting water use, total.....do....	62	55	2	2	3	-	-	-
By source of water:								
Utility.....do....	5	4	-	-	1	-	-	-
Other than utility.....do....	32	27	1	2	2	-	-	-
Source not specified.....do....	25	24	1	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	55	51	2	2	-	-	-	-
1-9 million gallons.....do....	3	1	-	1	1	-	-	-
100 million gallons and over.....do....	4	3	-	-	1	-	-	-
Employees.....do....	2,206	560	<u>567</u>	(D)	1,079	-	-	-
At establishments reporting water use.....do....	2,130	484	<u>567</u>	(D)	1,079	-	-	-
Value added in mining.....\$1,000..	24,736	6,786	<u>5,874</u>	(D)	12,076	-	-	-
Value added at establishments reporting water use.....do....	24,245	6,295	<u>5,874</u>	(D)	12,076	-	-	-
INDUSTRY 1092.—MERCURY ORES								
Establishments.....number..	49	47	1	1	-	-	-	-
Reporting water use, total.....do....	8	6	1	1	-	-	-	-
By source of water:								
Utility.....do....	1	1	-	-	-	-	-	-
Other than utility.....do....	3	1	1	1	-	-	-	-
Source not specified.....do....	4	4	-	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	6	6	-	-	-	-	-	-
10-19 million gallons.....do....	1	-	-	1	-	-	-	-
100 million gallons and over.....do....	1	-	1	-	-	-	-	-
Employees.....do....	316	<u>316</u>	(D)	(D)	-	-	-	-
At establishments reporting water use.....do....	228	<u>228</u>	(D)	(D)	-	-	-	-
Value added in mining.....\$1,000..	2,569	<u>2,569</u>	(D)	(D)	-	-	-	-
Value added at establishments reporting water use.....do....	1,800	<u>1,800</u>	(D)	(D)	-	-	-	-
INDUSTRY 1093.—TITANIUM ORES								
Establishments.....number..	8	3	-	4	1	-	-	-
Reporting water use, total.....do....	8	3	-	4	1	-	-	-
By source of water:								
Other than utility.....do....	8	3	-	4	1	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	2	2	-	-	-	-	-	-
10-19 million gallons.....do....	1	-	-	-	1	-	-	-
100 million gallons and over.....do....	5	1	-	4	-	-	-	-
Employees.....do....	997	52	-	<u>945</u>	(D)	-	-	-
Value added in mining.....\$1,000..	15,021	<u>15,021</u>	-	(D)	(D)	-	-	-
INDUSTRY 1094.—URANIUM-RADIUM-VANADIUM ORES								
Establishments.....number..	335	302	19	9	3	2	-	-
Reporting water use, total.....do....	157	124	19	9	3	2	-	-
By source of water:								
Utility.....do....	18	13	4	1	-	-	-	-
Other than utility.....do....	110	83	14	8	3	2	-	-
Source not specified.....do....	29	28	1	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	121	116	3	2	-	-	-	-
1-9 million gallons.....do....	5	1	3	1	-	-	-	-
10-19 million gallons.....do....	5	2	1	1	1	-	-	-
20-99 million gallons.....do....	11	3	7	1	-	-	-	-
100 million gallons and over.....do....	15	2	5	4	2	2	-	-
Employees.....do....	16,665	1,475	1,323	1,311	<u>2,413</u>	(D)	-	-
At establishments reporting water use.....do....	6,240	1,193	1,323	1,311	<u>2,413</u>	(D)	-	-
Value added in mining.....\$1,000..	190,629	48,705	32,174	40,692	<u>69,146</u>	(D)	-	-
Value added at establishments reporting water use.....do....	187,094	45,082	32,174	40,692	69,146	(D)	-	-

See footnotes at end of table.

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963—Continued

Item	Establishments, total	Establishments with an average of—						
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
INDUSTRY 1099.—METALLIC ORES, N.E.C.								
Establishments.....number..	25	24	1	-	-	-	-	-
Reporting water use, total.....do....	8	7	1	-	-	-	-	-
By source of water:								
Utility.....do....	2	2	-	-	-	-	-	-
Other than utility.....do....	6	5	1	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	5	4	1	-	-	-	-	-
1-9 million gallons.....do....	2	2	-	-	-	-	-	-
100 million gallons and over.....do....	1	1	-	-	-	-	-	-
Employees.....do....	165	165	(D)	-	-	-	-	-
At establishments reporting water use.....do....	151	151	(D)	-	-	-	-	-
Value added in mining.....\$1,000..	1,598	1,598	(D)	-	-	-	-	-
Value added at establishments reporting water use.....do....	1,540	1,540	(D)	-	-	-	-	-

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.

n.e.c. Not elsewhere classified.

<sup>1</sup>Includes figures for number of employees at separately reported central offices and related facilities. These were not distributed by size of establishment.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963

Type of operation and tons per man-hour <sup>1</sup>	Establishments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expenditures
		Total	Payroll	Total	Man-hours	Wages			
	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
	INDUSTRY 1092.--MERCURY ORES								
All establishments.....	49	316	1,839	279	610	1,562	2,569	3,658	317
Less than 0.010.....	3	7	19	7	15	19	20	15	15
0.010 to 0.019.....	2	26	95	21	38	84	112	151	41
0.020 to 0.029.....	1								
0.030 to 0.039.....	5								
0.040 and over.....	1	247	1,585	226	510	1,391	2,325	3,336	228
Undistributed <sup>2</sup> .....	37	36	140	25	47	68	112	156	33
	INDUSTRY 1094.--URANIUM-RADIUM-VANADIUM ORES								
All establishments.....	335	6,665	45,219	5,114	11,251	34,170	190,269	326,370	15,929
Processing establishments.....	297	6,453	43,676	4,950	11,146	33,932	190,600	326,370	15,179
Underground mines only, open stoping, total.....	190	1,589	9,631	1,436	3,006	8,498	33,898	40,324	1,935
Less than 0.10.....	4	23	95	23	38	95	159	155	46
0.20 to 0.29.....	7	263	1,528	247	505	1,403	3,906	4,425	127
0.30 to 0.39.....	10	135	625	131	234	604	1,468	1,686	56
0.40 to 0.49.....	11	357	2,472	321	688	2,255	6,048	7,328	47
0.50 to 0.59.....	1								
0.70 to 0.79.....	3								
0.80 to 0.89.....	1	141	1,196	118	294	993	4,516	5,395	147
0.90 and over.....	4	81	543	76	143	486	4,501	4,852	22
Undistributed <sup>2</sup> .....	149	589	3,172	520	1,104	2,662	13,300	16,483	1,490
Treatment plants only, total.....	17	989	5,450	721	1,461	3,850	21,287	88,677	4,032
0.002 to 0.004.....	6	392	2,009	300	587	1,514	10,376	29,580	650
0.005 to 0.007.....	1								
0.010 to 0.019.....	5								
0.020 to 0.029.....	1	501	2,881	360	750	2,010	12,821	57,545	1,460
Undistributed <sup>2</sup> .....	4	96	560	61	124	326	( <sup>3</sup> )	1,552	1,922

<sup>1</sup>For the Mercury Ores Industry, represents flasks (76 pounds each) of mercury metal shipped per man-hour worked by production, development, and exploration workers. For the Uranium-Radium-Vanadium Ores Industry represents: for open-stopping mines only, short tons of crude uranium-vanadium ores shipped and, for treatment plants only, short tons of uranium-vanadium concentrates shipped per man-hour worked by production, development, and exploration workers.

<sup>2</sup>Represents establishments reporting no shipments of primary products, or no production, development, and exploration worker man-hours, or cost of contract work amounting to 30 percent or more of production, development, and exploration worker wages, or number of working proprietors amounting to 30 percent or more of number of production, development, and exploration workers, or man-hours spent on development and exploration work amounting to 30 percent or more of total man-hours worked by production, development, and exploration workers.

<sup>3</sup>Not shown since the cost of supplies, minerals received for treatment, fuels, purchased electric energy, contract work, and purchased machinery installed exceeds the value of shipments and receipts plus capital expenditures.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining, by Geographic Areas: 1963

Division and ratio of payroll to value added in mining <sup>1</sup>	Establishments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expenditures
		Total	Payroll	Total	Man-hours	Wages			
	(number)		(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
INDUSTRY 1081.—METAL MINING SERVICES									
United States, total.....	83	2,206	13,923	1,891	4,018	11,485	24,736	32,360	3,039
Less than 0.10.....	1	18	22	15	23	15	618	644	60
0.10 to 0.19.....	5								
0.20 to 0.29.....	6	11	64	11	30	64	266	403	18
0.30 to 0.39.....	27	385	2,214	370	750	2,116	5,995	7,289	1,865
0.40 to 0.49.....	14	284	2,115	268	659	1,998	4,656	6,439	321
0.50 to 0.59.....	8	511	2,789	446	947	2,261	5,077	6,103	327
0.60 to 0.69.....	5	129	976	111	207	863	1,428	2,055	30
0.70 to 0.79.....	3	523	3,816	451	919	3,239	5,137	7,095	325
0.80 to 0.89.....	4	239	1,221	205	458	873	1,508	2,225	75
0.90 to 0.99.....	1								
1.00 and over.....	3	12	38	10	18	34	36	77	12
Undistributed <sup>2</sup> .....	6	94	668	4	7	22	15	30	6
East and South, total.....	30	488	2,642	398	772	1,989	4,495	5,637	409
0.10 to 0.19.....	2								
0.20 to 0.29.....	1	3	4	3	8	4	24	31	1
0.30 to 0.39.....	10	35	99	32	60	89	282	309	19
0.40 to 0.49.....	7	112	653	105	213	622	1,439	1,795	211
0.50 to 0.59.....	2								
0.60 to 0.69.....	1	247	1,240	214	398	1,049	2,233	2,677	161
0.70 to 0.79.....	1								
0.80 to 0.89.....	2	56	387	34	76	189	479	746	7
0.90 to 0.99.....	1								
1.00 and over.....	2	35	259	10	17	36	38	79	10
Undistributed <sup>2</sup> .....	1								
West, total.....	53	1,718	11,281	1,493	3,246	9,496	20,241	26,723	2,630
Less than 0.10.....	1								
0.10 to 0.19.....	3	26	82	23	45	75	860	1,016	77
0.20 to 0.29.....	5								
0.30 to 0.39.....	17	350	2,115	338	690	2,027	5,713	6,980	1,846
0.40 to 0.49.....	7	172	1,462	163	446	1,376	3,217	4,644	110
0.50 to 0.59.....	6	393	2,525	343	756	2,075	4,272	5,481	196
0.60 to 0.69.....	4								
0.70 to 0.79.....	2								
0.80 to 0.89.....	2	706	4,650	622	1,301	3,923	6,166	8,574	393
0.90 to 0.99.....	1								
1.00 and over.....	1								
Undistributed <sup>2</sup> .....	5	71	447	4	8	20	13	28	8
INDUSTRY 1092.—MERCURY ORES									
Total.....	49	316	1,839	279	610	1,562	2,569	3,658	317
0.30 to 0.39.....	2								
0.40 to 0.49.....	2	27	185	25	52	176	535	687	89
0.60 to 0.69.....	2								
0.70 to 0.79.....	2	184	1,094	166	378	927	1,524	2,131	166
0.80 to 0.89.....	2								
1.00 and over.....	7	76	433	70	146	404	421	707	37
Undistributed <sup>2</sup> .....	32	29	127	18	34	55	89	133	25
INDUSTRY 1093.—TITANIUM ORES									
Total.....	8	997	6,401	846	1,721	5,131	15,021	22,033	2,171
0.10 to 0.19.....	1								
0.20 to 0.29.....	1								
0.40 to 0.49.....	3	842	5,384	733	1,477	4,506	13,478	20,338	1,732
0.50 to 0.59.....	1								
0.90 to 0.99.....	1	155	1,017	113	244	625	1,543	1,695	439
Undistributed <sup>2</sup> .....	1								
INDUSTRY 1094.—URANIUM-RADIUM-VANADIUM ORES									
United States, total.....	335	6,665	45,219	5,114	11,251	34,170	190,629	326,370	15,929
Less than 0.10.....	22	336	2,122	282	574	1,770	29,761	38,460	558
0.10 to 0.19.....	33	1,414	9,212	1,068	2,410	6,855	57,260	103,605	2,114
0.20 to 0.29.....	59	2,346	17,409	1,772	4,140	13,455	69,642	111,763	3,251
0.30 to 0.39.....	31	795	5,408	647	1,342	4,277	15,707	26,580	3,861
0.40 to 0.49.....	24	197	1,090	191	413	1,064	2,469	5,645	544
0.50 to 0.59.....	11	523	3,288	415	901	2,534	6,032	17,234	863
0.60 to 0.69.....	10	207	836	186	292	738	1,309	1,950	180
0.70 to 0.79.....	8	168	1,480	162	403	1,434	2,061	3,094	21
0.80 to 0.89.....	1	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
0.90 to 0.99.....	4	95	705	80	204	578	726	635	484
1.00 and over.....	29	3,338	31,803	3,227	3,429	31,107	31,281	310,414	31,477
Undistributed <sup>2</sup> .....	103	246	1,866	84	141	378	4,381	6,990	2,576

See footnotes at end of table.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining, by Geographic Areas: 1963—Continued

Division and ratio of payroll to value added in mining <sup>1</sup>	Establishments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expenditures
		Total	Payroll	Total	Man-hours	Wages			
	(number)		(\$1,000)		(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
INDUSTRY 1094.—URANIUM-RADIUM-VANADIUM ORES—Continued									
United States—Continued									
Mountain.....	289	6,396	43,602	4,921	10,843	33,129	183,602	311,458	15,233
Less than 0.10.....	19	280	1,760	246	501	1,573	25,839	33,305	556
0.10 to 0.19.....	29	1,394	9,156	1,052	2,376	6,709	55,884	102,125	2,055
0.20 to 0.29.....	52	2,241	16,917	1,691	3,949	13,037	67,527	104,500	3,139
0.30 to 0.39.....	28	975	6,397	822	1,716	5,243	17,878	31,588	4,401
0.40 to 0.49.....	23								
0.50 to 0.59.....	11								
0.60 to 0.69.....	10	523	3,288	415	901	2,534	6,032	17,234	863
0.70 to 0.79.....	8	207	836	186	292	738	1,309	1,950	180
0.80 to 0.89.....	4	168	1,480	162	403	1,434	2,061	3,094	21
0.90 to 0.99.....	4	95	705	80	204	578	726	635	484
1.00 and over.....	25	326	1,744	216	407	1,031	1,257	10,391	1,396
Undistributed <sup>2</sup> .....	80	187	1,319	51	94	252	5,089	6,636	2,138
INDUSTRY 1099.—METALLIC ORES, N.E.C.									
Total.....	25	165	1,006	130	216	677	1,598	3,034	584
0.10 to 0.19.....	1	53	454	38	108	307	1,091	1,604	247
0.20 to 0.29.....	1								
0.40 to 0.49.....	3								
0.50 to 0.59.....	2	20	130	15	33	83	227	1,420	19
0.70 to 0.79.....	1								
0.80 to 0.89.....	1								
1.00 and over.....	4	75	271	74	71	270	268	10	298
Undistributed <sup>2</sup> .....	12	17	151	3	4	17	12	-	20

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.

<sup>1</sup>In computing these ratios contract or subcontract employment serving the establishment is excluded. The cost of contract or subcontract work expressed as a percent of payroll for 1963 was: for Metal Mining Services, 3 percent; for Mercury Ores, 13 percent; for Titanium Ores, 23 percent; for Uranium-Radium-Vanadium Ores, 24 percent; and for Metallic Ores, N.E.C., 0.4 percent.

<sup>2</sup>Represents establishments with zero or negative value added; establishment with no employees; and, for number of employees and payroll, includes figures for separately reported central offices and related facilities.

<sup>3</sup>Figures for ratio class 0.80 to 0.89 are included with those for ratio class 1.00 and over.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963

Value added per employee class <sup>1</sup>	Number of employees	Number of establishments with average employment of--							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1081.—METAL MINING SERVICES									
Total.....	2,206	83	66	10	2	2	3	-	-
Less than \$3,000.....	19	5	5	-	-	-	-	-	-
\$3,000 to \$3,999.....	3	3	3	-	-	-	-	-	-
\$4,000 to \$4,999.....	13	3	3	-	-	-	-	-	-
\$5,000 to \$5,999.....	237	6	4	1	-	1	-	-	-
\$6,000 to \$6,999.....	12	4	4	-	-	-	-	-	-
\$7,000 to \$7,999.....	8	5	5	-	-	-	-	-	-
\$8,000 to \$8,999.....	319	10	6	3	-	1	-	-	-
\$9,000 to \$9,999.....	511	4	3	-	-	-	1	-	-
\$10,000 to \$12,499.....	393	14	12	-	1	-	1	-	-
\$12,500 to \$14,999.....	122	11	8	3	-	-	-	-	-
\$15,000 to \$17,499.....	324	5	3	1	-	-	1	-	-
\$20,000 and over.....	153	8	5	2	1	-	-	-	-
Undistributed <sup>2</sup> .....	92	5	5	-	-	-	-	-	-
INDUSTRY 1092.—MERCURY ORES									
Total.....	316	49	46	1	1	1	-	-	-
Less than \$3,000.....	35	15	15	-	-	-	-	-	-
\$3,000 to \$3,999.....	25	2	2	-	-	-	-	-	-
\$4,000 to \$4,999.....		3	3	-	-	-	-	-	-
\$6,000 to \$6,999.....		1	-	-	1	-	-	-	-
\$8,000 to \$8,999.....		1	-	-	-	1	-	-	-
\$9,000 to \$9,999.....		1	1	-	-	-	-	-	-
\$10,000 to \$12,499.....		1	1	-	-	-	-	-	-
\$12,500 to \$14,999.....		31	1	1	-	-	-	-	-
\$20,000 and over.....		1	1	1	-	-	-	-	-
Undistributed <sup>2</sup> .....		8	23	23	-	-	-	-	-
INDUSTRY 1093.—TITANIUM ORES									
Total.....	997	8	1	2	-	4	1	-	-
\$4,000 to \$4,999.....	647	1	-	1	-	-	-	-	-
\$10,000 to \$12,499.....		2	-	-	-	2	-	-	-
\$12,500 to \$14,999.....		1	-	-	-	-	1	-	-
\$15,000 to \$17,499.....		1	-	-	-	1	-	-	-
\$20,000 and over.....	350	2	-	1	-	1	-	-	-
Undistributed <sup>2</sup> .....		1	1	-	-	-	-	-	-
INDUSTRY 1094.—URANIUM-RADIUM-VANADIUM ORES									
Total.....	6,665	335	284	18	19	9	3	2	-
Less than \$3,000.....	173	28	27	-	1	-	-	-	-
\$3,000 to \$3,999.....	35	13	13	-	-	-	-	-	-
\$4,000 to \$4,999.....	153	9	7	1	1	-	-	-	-
\$5,000 to \$5,999.....	218	11	8	1	2	-	-	-	-
\$6,000 to \$6,999.....	8	3	3	-	-	-	-	-	-
\$7,000 to \$7,999.....	86	6	5	-	1	-	-	-	-
\$8,000 to \$8,999.....	95	9	7	1	1	-	-	-	-
\$9,000 to \$9,999.....	63	9	8	1	-	-	-	-	-
\$10,000 to \$12,499.....	554	14	11	1	1	-	1	-	-
\$12,500 to \$14,999.....	280	20	17	2	-	1	-	-	-
\$15,000 to \$17,499.....	278	21	20	-	-	-	-	-	-
\$17,500 to \$19,999.....	217	13	10	1	2	-	-	-	-
\$20,000 and over.....	4,283	84	54	9	10	7	2	2	-
Undistributed <sup>2</sup> .....	222	93	94	1	1	-	-	-	-
INDUSTRY 1099.—METALLIC ORES, N.E.C.									
Total.....	165	25	23	1	1	-	-	-	-
Less than \$3,000.....	73	2	2	-	-	-	-	-	-
\$3,000 to \$3,999.....		1	-	-	1	-	-	-	-
\$4,000 to \$4,999.....		1	1	-	-	-	-	-	-
\$5,000 to \$5,999.....		5	2	2	-	-	-	-	-
\$7,000 to \$7,999.....	5	2	2	-	-	-	-	-	-
\$9,000 to \$9,999.....		1	1	-	-	-	-	-	-
\$10,000 to \$12,499.....		3	3	-	-	-	-	-	-
\$17,500 to \$19,999.....		66	1	1	-	-	-	-	-
\$20,000 and over.....	16	1	-	1	-	-	-	-	-
Undistributed <sup>2</sup> .....		11	11	-	-	-	-	-	-

Standard Notes: - Represents zero.  
n.e.c. Not elsewhere classified.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>In computing these ratios contract or subcontract employment serving the establishment is excluded. The cost of contract or subcontract work expressed as a percent of payroll for 1963 was: for Metal Mining Services, 3 percent; for Mercury Ores, 13 percent; for Titanium Ores, 23 percent; for Uranium-Radium-Vanadium Ores, 24 percent; and for Metallic Ores, N.E.C., 0.4 percent.

<sup>2</sup>Represents establishments with no employees or with negative value added in mining and, for number of employees, figures for separately reported central offices and related facilities.

**TABLE 11. Hourly Earnings of Production, Development, and Exploration Workers  
for Establishments with 10 or More Employees, by Geographic Areas: 1963**

Industry by hourly earning classes	Number of employees	Number of establishments with 10 or more employees in--									
		Total	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
INDUSTRY 1081.—METAL MINING SERVICES											
Total.....	2,031	21	1	-	1	2	1	1	2	13	-
Less than \$1.00.....	223 {	1	-	-	-	-	-	-	1	-	-
\$1.50 to \$1.99.....		2	-	-	-	-	-	-	-	2	-
\$2.00 to \$2.49.....		3	-	-	-	1	1	-	-	1	-
\$2.50 to \$2.99.....		4	-	-	1	-	-	1	1	1	-
\$3.00 to \$3.49.....		4	-	-	-	-	-	-	-	4	-
\$3.50 to \$3.99.....		652	4	-	-	-	1	-	-	-	3
\$4.00 to \$4.49.....		162 {	1	-	-	-	-	-	-	-	1
\$4.50 and over.....	2		1	-	-	-	-	-	-	1	-
INDUSTRY 1092.—MERCURY ORES											
Total.....	254	4	-	-	-	-	-	-	-	1	3
Less than \$1.00.....	254 {	-	-	-	-	-	-	-	-	-	-
\$2.00 to \$2.49.....		1	-	-	-	-	-	-	-	-	1
\$2.50 to \$2.99.....		1	-	-	-	-	-	-	-	-	1
\$3.00 to \$3.49.....		1	-	-	-	-	-	-	-	1	-
\$3.50 to \$3.99.....		1	-	-	-	-	-	-	-	-	1
INDUSTRY 1093.—TITANIUM ORES											
Total.....	(D)	7	-	2	-	-	5	-	-	-	-
\$1.50 to \$1.99.....	(D)	1	-	-	-	-	1	-	-	-	-
\$2.00 to \$2.49.....	(D)	2	-	-	-	-	2	-	-	-	-
\$2.50 to \$2.99.....	822 {	3	-	1	-	-	2	-	-	-	-
\$3.50 to \$3.99.....		1	-	1	-	-	-	-	-	-	-
INDUSTRY 1094.—URANIUM-RADIUM-VANADIUM ORES											
Total.....	15,962	76	-	-	1	-	-	-	1	72	2
\$1.00 to \$1.49.....	157 {	1	-	-	-	-	-	-	-	1	-
\$1.50 to \$1.99.....		2	-	-	-	-	-	-	-	2	-
\$2.00 to \$2.49.....		816	15	-	-	1	-	-	-	-	-
\$2.50 to \$2.99.....		2,339	30	-	-	-	-	-	1	13	-
\$3.00 to \$3.49.....		1,251	15	-	-	-	-	-	-	29	1
\$3.50 to \$3.99.....		851	7	-	-	-	-	-	-	15	-
\$4.00 to \$4.49.....		548 {	5	-	-	-	-	-	-	7	-
\$4.50 and over.....	1		-	-	-	-	-	-	-	4	1
									1	-	
INDUSTRY 1099.—METALLIC ORES, N.E.C.											
Total.....	146	5	-	1	1	-	1	-	-	-	2
\$1.50 to \$1.99.....	146 {	1	-	-	-	-	1	-	-	-	-
\$2.00 to \$2.49.....		2	-	1	-	-	-	-	-	-	1
\$3.50 to \$3.99.....		1	-	-	-	-	-	-	-	-	1
\$4.00 to \$4.49.....		1	-	-	-	-	1	-	-	-	-

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>Excludes figures for separately reported central offices and related facilities.



TABLE 12. Distribution of Operating Companies by Employment Size and by Number of Establishments: 1963

Industry by establishment count	Number of--		Number of establishments with average employment of--									
	Operating companies	Employees	Total	0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1081.—METAL MINING SERVICES												
Total.....	82	2,206	83	49	13	4	10	2	2	3	-	-
Multiunit companies, total....	5	1,071	6	1	1	-	1	-	1	2	-	-
1 establishment <sup>1</sup> .....	4	1,071	4	1	-	-	-	-	1	2	-	-
2 establishments.....	1		2	-	1	-	1	-	-	-	-	-
Single unit companies.....	77	1,135	77	48	12	4	9	2	1	1	-	-
INDUSTRY 1092.—MERCURY ORES												
Total.....	49	316	49	40	5	1	1	1	1	-	-	-
Multiunit companies, total....	4	222	4	2	-	-	-	1	1	-	-	-
1 establishment <sup>1</sup> .....	4	222	4	2	-	-	-	1	1	-	-	-
Single unit companies.....	45	94	45	38	5	1	1	-	-	-	-	-
INDUSTRY 1093.—TITANIUM ORES												
Total.....	7	997	8	1	-	-	2	-	4	1	-	-
Multiunit companies, total....	5	969	6	-	-	-	1	-	4	1	-	-
1 establishment <sup>1</sup> .....	4	969	4	-	-	-	1	-	2	1	-	-
2 establishments.....	1		2	-	-	-	-	-	2	-	-	-
Single unit companies.....	2	28	2	1	-	-	1	-	-	-	-	-
INDUSTRY 1094.—URANIUM-RADIUM-VANADIUM ORES												
Total.....	266	6,665	335	218	41	25	18	19	9	3	2	-
Multiunit companies, total....	33	<sup>2</sup> 5,697	102	31	14	11	16	17	8	3	2	-
1 establishment <sup>1</sup> .....	14	1,169	14	-	1	-	4	7	1	1	-	-
2 establishments.....	10	1,470	20	6	4	2	2	2	2	1	1	-
3 or 4 establishments.....	4	321	14	4	3	2	3	1	1	-	-	-
5 or 6 establishments.....	1	2,594	6	1	1	1	2	-	-	-	1	-
7 to 9 establishments.....	2		17	5	1	1	2	5	2	1	-	-
10 to 14 establishments.....	1		12	3	1	4	1	1	2	-	-	-
15 to 19 establishments.....	1		19	12	3	1	2	1	-	-	-	-
Single unit companies.....	233	968	233	187	27	14	2	2	1	-	-	-
INDUSTRY 1099.—METALLIC ORES, N.E.C.												
Total.....	25	165	25	20	-	3	1	1	-	-	-	-
Multiunit companies, total....	3	38	3	1	-	2	-	-	-	-	-	-
1 establishment <sup>1</sup> .....	3	38	3	1	-	2	-	-	-	-	-	-
Single unit companies.....	22	127	22	19	-	1	1	1	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.

<sup>1</sup>Represents companies having at least one establishment classified in other industries or subindustries.

<sup>2</sup>The total includes but the detail excludes figures for separately reported central offices and related facilities.

## COAL MINING

This report shows 1963 Census of Mineral Industries statistics for establishments classified in Major Group 11, Anthracite Mining, and major Group 12, Bituminous Coal and Lignite Mining. The separate industries included in these major groups and the reports in which they appear are:

Report	Industries Covered
MIC63(1)-11B— Anthracite mining	{ 1111—Anthracite 1112—Anthracite mining services
MIC63(1)-12A— Bituminous Coal and Lignite Mining	{ 1211—Bituminous coal 1212—Lignite 1213—Bituminous coal and lignite mining services

Major Group 11, Anthracite Mining, represents establishments primarily engaged in producing anthracite (hard coal). Mining operations, dredging operations, and preparation plants also known as cleaning plants, breakers, and washeries, whether or not such plants are operated in conjunction with the mine served, are included. Major Group 12, Bituminous Coal and Lignite Mining, represents establishments primarily engaged in producing bituminous coal or lignite. Included are mining operations and preparation plants, also known as cleaning plants, washeries, crushing plants, and screening and sizing plants, whether or not such plants are operated in conjunction with the mine served. The production of fuel briquets and packaged fuel is classified in Major Group 29, the production of coke in industry 3312, and the production of manufactured gas from coal in industry 4925.

Establishments were classified by industry on the basis of the kind of coal produced—anthracite, bituminous coal, and lignite; or in the case of service establishments, on the basis of the industry principally served and the principal kind of work done. The statistics for anthracite relate only to its production in eastern Pennsylvania, including, because of its proximity to the anthracite counties, the semianthracite produced in the Bernice Basin in Sullivan County. The statistics for bituminous coal and lignite cover all other coal mining activity in the United States. The bituminous coal statistics include subbituminous, semianthracite, and all coal sometimes classified as anthracite which is mined outside of Pennsylvania.

The combined value of shipments and receipts in 1963 of all industries in Major Groups 11 and 12 was \$2,633 million. Establishments in the Anthracite Industry accounted for \$221 million and the Anthracite Mining Services Industry for \$16 million. The Bituminous Coal Industry accounted for \$2,358 million, the Lignite Industry for \$14 million, and the Bituminous Coal and Lignite Mining Services Industry for \$24 million.

Net coal shipments in the United States in 1963 were 483 million tons, including 18 million tons of anthracite, 459 million tons of bituminous coal, and 5 million tons of lignite. These figures exclude coal produced and used in the same establishment for power or heat which in 1963 amounted to 0.8 million tons.

The above figures for value of shipments and receipts for the Anthracite, Bituminous Coal, and Lignite Industries represent gross shipments. They contain duplication due to the inclusion of the value of coal transferred from one establishment to other establishments in the same industry for preparation and to the inclusion of some purchases for resale. In order to eliminate this duplication, net shipments and receipts figures have been derived for each industry by subtracting from the gross shipments the value of coal shipments to preparation plants and the resale value of coal purchased for resale without preparation. Similarly, the service industries gross receipts were adjusted to a net basis by excluding purchases for resale. Net shipments and receipts for the coal industries were as follows: For all Coal Mining, \$2,273 million; for Anthracite, \$157 million; for Bituminous coal, \$2,063 million; and Lignite, \$14 million.

This report presents in table 1 comparative general statistics for all coal mining industries combined for the census years 1840-1963. Table 2A presents general statistics by industry for the United States and for geographic areas. Table 2B presents some cost, capital, and product details for the coal mining industries for selected geographic areas. Table 2C shows number of establishments, employment, and value added in mining by major types of operation for the same geographic areas. In table 3, detailed statistics are shown by industry for the United States. Table 4 shows selected statistics for establishments classified by employment size for all coal mining and separately for Major Groups 11 and 12. It also includes the number of coal mining establishments by employment size and geographic area.

# COAL MINING

Distribution of Employment by State: 1963



Employment and Production: 1840-1963

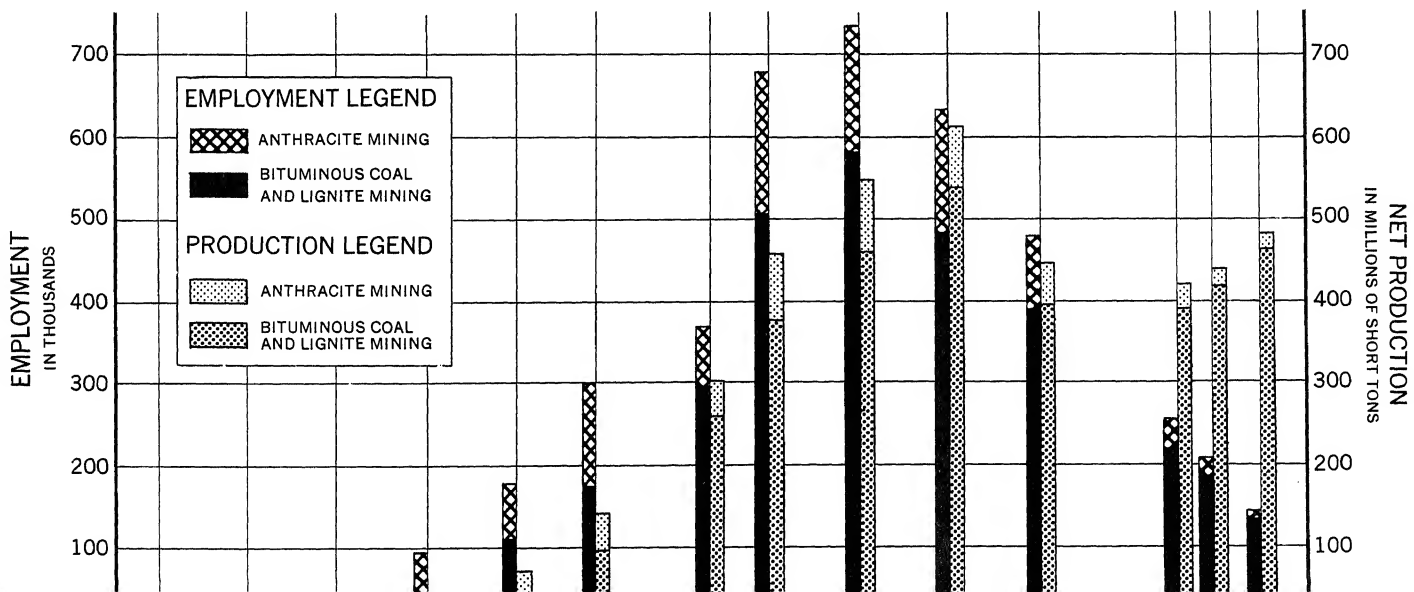


TABLE 1. General Statistics: 1963 and Earlier Years

Industry and year	Operating companies (number)	Establishments		All employees		Production, development, and exploration workers			Selected expenses				Value of shipments and receipts (\$1,000)	Value of net shipments and receipts <sup>1</sup> (\$1,000)	Net production of coal <sup>2</sup> (\$1,000)	Capital expenditures (\$1,000)	Energy used (million kwh. equivalent)	Horse-power rating of power equipment (1,000 hp.)
		Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours	Wages (\$1,000)	Supplies, purchases for resale, and purchased energy (\$1,000)	Minerals received for preparation (\$1,000)	Contract work (\$1,000)	Purchased machinery installed (\$1,000)						
1963:																		
Coal mining industries, total.....	6,863	7,374	1,268	145,648	821,098	128,953	237,186	700,844	494,389	349,482	88,363	206,919	2,632,930	2,272,785	482,376	233,451	18,763	7,005
Coal mining industries, total.....	6,699	7,200	1,234	143,250	808,273	126,747	233,063	689,450	483,297	349,482	86,365	201,931	2,233,672	2,233,672	482,376	228,119	18,180	6,727
Coal mining services industries.....	172	174	34	2,398	12,825	2,206	4,123	11,394	11,092	(X)	1,998	4,968	39,113	39,113	( <sup>3</sup> )	5,332	583	276
1958:																		
Coal mining industries, total.....	7,465	8,188	1,534	210,776	1,008,462	183,777	299,037	841,525	495,802	411,099	111,796	162,227	2,756,036	2,332,576	439,938	205,081	18,853	(NA)
Coal industries.....	7,233	7,946	1,471	206,155	987,207	179,611	292,032	823,030	478,903	411,099	109,698	155,571	2,699,601	2,276,141	439,938	198,498	17,830	(NA)
Coal mining services industries.....	240	242	63	4,621	21,255	4,166	7,005	18,495	16,899	(X)	2,058	6,656	56,435	56,435	( <sup>3</sup> )	6,583	1,023	(NA)
1954:																		
Coal mining industries, total.....	7,406	8,301	1,712	256,668	1,013,344	232,996	374,723	881,279	430,477	323,922	106,796	131,588	2,483,198	2,104,190	421,031	130,581	22,609	7,853
Coal industries.....	7,135	8,004	1,633	250,529	989,417	227,462	366,060	860,514	415,203	323,922	104,975	125,433	2,422,707	2,043,699	421,031	125,560	21,647	7,254
Coal mining services industries.....	296	297	79	6,139	23,927	5,534	8,663	20,765	15,274	(X)	1,821	6,155	60,491	60,491	( <sup>3</sup> )	5,021	962	599
1939: 4																		
Coal mining industries, total.....	5,539	(NA)	(NA)	479,370	596,726	454,066	670,164	539,986	154,776	(NA)	13,080	(NA)	(NA)	932,553	446,572	(NA)	42,303	4,465
Coal industries.....	5,437	5,635	(NA)	476,263	592,210	451,174	665,422	536,326	150,909	(NA)	12,939	(NA)	(NA)	920,463	446,572	(NA)	42,042	4,383
Coal mining services industries.....	103	(NA)	(NA)	3,107	4,516	2,882	4,742	3,660	3,867	(X)	141	(NA)	12,090	12,090	( <sup>3</sup> )	1,050	261	82
1935: 4 6																		
Coal mining industries, total.....	(NA)	(NA)	(NA)	551,650	569,969	527,864	(NA)	522,779	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	424,413	(NA)	(NA)	(NA)
Coal industries.....	(NA)	76,661	(NA)	548,395	565,789	524,811	(NA)	519,041	139,267	(NA)	(NA)	(NA)	(NA)	868,826	424,413	(NA)	(NA)	(NA)
Coal mining services <sup>8</sup> .....	(NA)	(NA)	(NA)	3,255	4,180	3,053	(NA)	3,738	2,848	(X)	(NA)	(NA)	(NA)	(NA)	( <sup>3</sup> )	(NA)	(NA)	(NA)
Coal industries only:																		
1929: 4	(NA)	5,193	(NA)	633,692	884,815	601,636	(NA)	804,886	202,124	(NA)	8,692	40,527	(NA)	1,351,548	611,989	(NA)	80,460	4,167
1919:	(NA)	6,924	(NA)	734,770	975,489	693,784	(NA)	893,731	253,403	433	4,431	(NA)	1,510,396	1,509,963	454,597	(NA)	157,342	3,058
1909:	(NA)	4,765	(NA)	679,963	388,093	657,778	(NA)	263,009	84,396	-	4,109	(NA)	550,844	550,844	4,577,940	(NA)	1,910	1,910
1902: 4 10	(NA)	5,017	(NA)	368,230	237,932	113,500,754	(NA)	220,470	37,710	(NA)	1,684	(NA)	(NA)	367,032	301,591	(NA)	955	955
1889: 4	(NA)	1,122,552	(NA)	299,559	109,130	291,479	(NA)	103,426	18,828	(NA)	3,155	(NA)	(NA)	1,360,227	1,241,230	(NA)	(NA)	(NA)
1880: 4	(NA)	138,419	(NA)	179,989	55,912	(NA)	(NA)	84,159	11,599	(NA)	(NA)	(NA)	(NA)	1,995,758	1,771,482	(NA)	132	132
1870: 4	(NA)	1,566	(NA)	94,754	44,317	(NA)	(NA)	67,856	5,669	(NA)	(NA)	(NA)	(NA)	36,823	36,823	(NA)	63	63
1860: 4	(NA)	622	(NA)	36,486	9,650	(NA)	(NA)	17,491	2,753	(NA)	(NA)	(NA)	(NA)	20,244	14,334	(NA)	(NA)	(NA)
1850: 4	(NA)	510	(NA)	15,118	4,069	(NA)	(NA)	6,928	246	(NA)	(NA)	(NA)	(NA)	7,174	6,446	(NA)	(NA)	(NA)
1840: 4	(NA)	(NA)	(NA)	6,811	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	2,071	(NA)	(NA)	(NA)

Note: For explanation of column captions see appendix A. For more detailed historical statistics for these industries, see Table 1 of the corresponding chapter of the 1954 Census of Mineral Industries, Vol. 1.

Standard Notes: - Represents zero.. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
<sup>1</sup>Represents gross shipments and receipts less coal transferred to other establishments for preparation and less purchases for resale. For 1939 and earlier years, represents value of products and receipts.  
<sup>2</sup>Represents the clean-coal equivalent of all coal mined, based on the location of the mine, including coal produced and used at the same establishment for power or heat.  
<sup>3</sup>Coal mined by the Coal Mining Services Industries is included in the production shown for the Coal Industries.  
<sup>4</sup>Excludes data for Alaska.  
<sup>5</sup>Represents number of mines, culm banks, and dredges.  
<sup>6</sup>Represents producing operations only.  
<sup>7</sup>For the Bituminous Coal and Lignite Industries, represents number of mines.  
<sup>8</sup>Represents anthracite stripping services only.  
<sup>9</sup>Excludes purchased electric energy. For 1929, the quantity of purchased electric energy amounted to only 3 percent of the total kwh equivalent of energy used.  
<sup>10</sup>For 1902, data were also obtained from the operators of coal mines on the average number of employees at contract service operations performed for them. The total number of such employees was reported as 6,906.  
<sup>11</sup>Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.  
<sup>12</sup>Includes data for 9,920 "local mines and farmers' banks," producing about 2 percent of all bituminous coal and lignite, for which no data are available on labor and expenditures. For number of establishments, see also footnote 5.  
<sup>13</sup>Includes data for 5,148 bituminous coal and lignite mines, producing 917 thousand tons of coal valued at \$1,093 thousand, representing "irregular" operations for which no other data are available.

TABLE 2A. General Statistics for Industries and Geographic Areas: 1963 and 1958

Code	Industry and geographic area	1963											1958	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)						
	United States, total.....	7,374	1,268	145,648	821,098	128,953	237,186	700,844	1,727,228	1,139,153	2,632,930	233,451	210,776	1,780,233
	Coal industries.....	7,200	1,234	143,250	808,273	126,747	233,063	689,450	1,700,435	1,121,095	2,593,411	228,119	206,155	1,742,828
	Coal mining services industries.....	174	34	2,398	12,825	2,206	4,123	11,394	26,793	18,058	39,519	5,332	4,621	37,405
11	Anthracite mining, total.....	1,069	102	11,786	58,835	10,324	19,544	49,889	120,540	131,082	236,511	15,111	22,813	164,489
1111	Anthracite.....	1,026	85	10,692	53,022	9,331	17,758	44,867	110,527	123,097	220,973	12,651	19,712	142,198
1112	Anthracite mining services.....	43	17	1,094	5,813	993	1,786	5,022	10,013	7,985	15,538	2,460	3,101	22,291
12	Bituminous coal and lignite mining, total.....	6,305	1,166	133,862	762,263	118,629	217,642	650,955	1,606,688	1,008,071	2,396,419	218,340	187,963	1,615,744
1211	Bituminous coal.....	6,115	1,143	132,046	752,491	116,975	214,421	642,338	1,578,078	991,083	2,358,326	210,835	185,933	1,591,321
1212	Lignite.....	59	6	512	2,760	441	884	2,245	11,830	6,915	14,112	4,633	510	9,309
1213	Bituminous coal and lignite mining services.....	131	17	1,304	7,012	1,213	2,337	6,372	16,780	10,073	23,981	2,872	1,520	15,114
	Geographic Area													
	Northeast region:.....	2,283	293	36,435	204,344	31,567	59,366	167,182	401,522	341,164	682,860	59,826	60,539	456,267
	Pennsylvania:													
	Coal mining, total.....	2,283	293	36,196	201,787	31,567	59,366	167,182	401,522	341,164	682,860	59,826	60,169	456,267
	Coal industries.....	2,200	271	34,649	193,456	30,154	56,632	159,841	386,367	329,996	659,838	56,525	56,503	428,582
	Coal mining services industries.....	83	22	1,547	8,331	1,413	2,734	7,341	15,155	11,168	23,022	3,301	3,666	27,685
11	Anthracite mining, total....	1,069	102	11,786	58,835	10,324	19,544	49,889	120,540	131,082	236,511	15,111	22,813	164,489
1111	Anthracite.....	1,026	85	10,692	53,022	9,331	17,758	44,867	110,527	123,097	220,973	12,651	19,712	142,198
1112	Anthracite mining services.....	43	17	1,094	5,813	993	1,786	5,022	10,013	7,985	15,538	2,460	3,101	22,291
12	Bituminous coal mining, total.....	1,214	191	24,410	142,952	21,243	39,822	117,293	280,982	210,082	446,349	44,715	37,356	291,778
1211	Bituminous coal.....	1,174	186	23,957	140,434	20,823	38,874	114,974	275,840	206,899	438,865	43,874	36,791	286,384
1213	Bituminous coal mining services.....	40	5	453	2,518	420	948	2,319	5,142	3,183	7,484	841	565	5,394
	East North Central division, total:													
12	Bituminous coal mining, total.....	575	170	20,446	136,511	17,705	34,531	115,796	310,365	181,860	436,317	55,908	25,301	284,145
1211	Bituminous coal.....	554	167	20,263	135,595	17,529	34,210	114,906	307,782	180,805	433,097	55,490	25,201	283,283
1213	Bituminous coal mining services.....	21	3	183	916	176	321	890	2,583	1,055	3,220	418	100	862
	Ohio:													
12	Bituminous coal mining, total.....	397	83	8,483	51,342	7,250	14,055	42,315	107,148	84,034	169,073	22,109	10,036	100,958
1211	Bituminous coal.....	382	80	8,316	50,515	7,090	13,759	41,514	104,869	83,056	166,206	21,719	9,938	100,122
1213	Bituminous coal mining services.....	15	3	167	827	160	296	801	2,279	978	2,867	390	98	836
	Indiana:													
12	Bituminous coal mining.....	72	20	2,970	19,787	2,583	4,783	16,770	46,234	21,728	58,094	9,868	4,105	44,289
1211	Bituminous coal.....	69	20	2,959	19,710	2,572	4,763	16,693	45,969	21,666	57,793	9,842	4,104	44,268
	Illinois:													
12	Bituminous coal mining.....	106	67	8,993	65,382	7,872	15,693	56,711	156,983	76,098	209,150	23,931	11,140	138,898
1211	Bituminous coal.....	103	67	8,988	65,370	7,867	15,688	56,699	156,944	76,083	209,098	23,929	11,139	138,893
	West North Central division:													
12	Bituminous coal and lignite mining.....	132	17	2,037	(D)	1,222	(D)	(D)	(D)	(D)	(D)	(D)	2,201	(D)
1211	Bituminous coal.....	85	12	1,675	9,881	907	1,923	5,649	17,927	11,967	22,997	6,897	1,877	16,022
1211	Iowa:													
	Bituminous coal mining.....	39	3	289	1,308	267	585	1,183	3,470	1,608	4,457	621	425	3,592
	Bituminous coal.....	36	3	274	1,246	254	561	1,131	3,350	1,556	4,292	614	421	3,552
1211	Missouri (bituminous coal).....	35	6	1,137	6,591	415	856	2,745	14,577	10,411	18,705	6,283	1,204	9,832
1211	Kansas (bituminous coal).....	14	3	264	2,044	238	506	1,773						
	South Atlantic division:													
12	Bituminous coal mining, total.....	2,428	451	53,497	299,414	48,310	88,313	261,401	608,599	354,355	902,616	60,338	76,542	642,475
1211	Bituminous coal.....	2,390	445	53,061	296,987	47,904	87,605	259,258	602,800	350,067	893,578	59,289	75,925	636,742
1213	Bituminous coal mining services.....	38	6	436	2,427	406	708	2,143	5,799	4,288	9,038	1,049	617	5,733
1211	Maryland (bituminous coal).....	64	4	413	1,455	398	671	1,408	3,709	2,063	5,185	587	540	2,985
	Virginia:													
12	Bituminous coal mining, total.....	775	129	11,525	49,009	10,469	17,926	43,525	98,118	70,724	159,425	9,417	13,858	101,666
1211	Bituminous coal.....	769	126	11,349	47,858	10,309	17,686	42,580	95,639	68,131	154,963	8,807	13,737	100,135
1213	Bituminous coal mining services.....	6	3	176	1,151	160	240	945	2,479	2,593	4,462	610	121	1,531
	West Virginia:													
12	Bituminous coal mining, total.....	1,586	318	41,553	248,939	37,438	69,709	216,458	506,755	281,564	737,985	50,334	62,110	537,591
1211	Bituminous coal.....	1,554	315	41,293	247,663	37,192	69,241	215,260	503,435	279,869	733,409	49,895	61,634	533,574
1213	Bituminous coal mining services.....	32	3	260	1,276	246	468	1,198	3,320	1,695	4,576	439	476	4,017

See footnotes at end of table.

TABLE 2A. General Statistics for Industries and Geographic Areas 1963 and 1958—Continued

Code	Industry and geographic area	1963										1958		
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages						
	Geographic Area—Continued													
	East South Central division, total:													
12	Bituminous coal mining, total:	1,674	282	28,372	140,318	25,787	44,891	123,942	308,917	206,795	477,946	37,766	38,684	304,972
1211	Bituminous coal.....	1,658	280	28,240	139,755	25,662	44,686	123,414	307,202	205,851	475,789	37,264	38,511	302,832
1213	Bituminous coal mining services.....	16	2	132	563	125	205	528	1,715	944	2,157	502	173	2,140
	Kentucky:													
12	Bituminous coal mining, total:	1,203	222	20,785	101,490	18,931	33,208	90,698	219,845	163,580	353,699	29,726	28,512	228,807
1211	Bituminous coal.....	1,194	222	20,740	101,310	18,888	33,129	90,534	219,303	163,266	353,149	29,420	28,397	227,458
1213	Bituminous coal mining services.....	9	-	45	181	43	79	164	542	314	550	306	115	1,349
	Tennessee:													
12	Bituminous coal mining.....	274	17	1,846	8,112	1,658	2,807	7,141	20,329	10,153	27,276	3,206	2,688	16,820
1211	Bituminous coal.....	271	17	1,835	8,044	1,648	2,785	7,080	20,146	10,043	27,015	3,174	2,661	16,575
	Alabama:													
12	Bituminous coal mining, total:	197	43	5,741	30,716	5,198	8,876	26,103	68,743	33,062	96,971	4,834	7,484	59,345
1211	Bituminous coal.....	193	41	5,665	30,402	5,126	8,772	25,800	67,753	32,542	95,625	4,670	7,453	58,799
1213	Bituminous coal mining services.....	4	2	76	314	72	104	303	990	520	1,346	164	31	546
	West South Central division:													
12	Bituminous coal and lignite mining.....	47	8	596	(D)	539	(D)	(D)	(D)	(D)	(D)	(D)	1,241	(D)
1211	Bituminous coal.....	40	7	453	2,430	421	773	2,215	5,513	2,688	7,381	820	1,059	10,618
1211	Arkansas (bituminous coal).....	17	1	107	523	105	206	517	1,348	493	1,528	313	252	2,081
1211	Oklahoma (bituminous coal).....	23	6	346	1,907	316	567	1,698	4,165	2,195	5,853	507	807	8,537
	Mountain division:													
12	Bituminous coal mining.....	213	42	3,870	22,115	3,467	5,771	19,509	56,590	31,204	81,455	6,339	5,735	48,790
1211	Bituminous coal.....	195	41	3,771	21,548	3,381	5,614	19,036	54,864	30,603	79,177	6,290	5,666	48,051
	Wyoming:													
12	Bituminous coal mining, total:	21	7	364	1,871	313	484	1,586	7,277	3,359	10,385	251	538	4,690
1211	Bituminous coal.....	18	6	304	1,485	265	402	1,286	6,185	2,951	8,893	243	506	4,244
1213	Bituminous coal mining services.....	3	1	60	386	48	82	300	1,092	408	1,492	8	32	446
1211	Colorado (bituminous coal).....	100	16	1,374	8,118	1,242	2,205	7,214	19,470	6,874	24,033	2,311	2,016	16,348
1211	Utah (bituminous coal).....	36	16	1,726	9,941	1,556	2,502	8,880	23,337	17,654	39,213	1,778	2,824	25,376
	Pacific:													
12	Bituminous coal and lignite mining.....	22	5	395	3,349	356	752	2,931	6,216	2,277	7,578	915	533	7,389
1211	Bituminous coal.....	19	5	387	3,304	348	736	2,886	6,150	2,203	7,442	911	533	7,389
1211	Washington (bituminous coal)....	9	2	193	1,078	177	291	973	1,141	412	1,548	5	276	1,609
1211	Alaska (bituminous coal).....	10	3	194	2,226	171	445	1,913	5,009	1,791	5,894	906	257	5,780

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>Includes data for central offices and related facilities for the Anthracite Industry in New York.<sup>2</sup>Includes data for central offices and related facilities in Wisconsin.

**TABLE 2B. Selected Expenditures and Net Shipments of Primary Products, by Industry,  
for Selected Geographic Areas: 1963**

Ind. code	Industry and geographic area	Selected expenses					Capital expenditures			Net shipments of primary products or receipts for primary services <sup>2</sup> by establishments classified in--			
		Total	Supplies, purchases for resale, and purchased energy	Coal received for pre- paration	Contract or sub- contract work	Purchased machinery installed	Total	Development and exploration of mineral property	Plant and other con- struction, machinery, and equip- ment <sup>1</sup>	The industry		Other mineral industries	
										Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
		(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)				
	United States:												
	All coal mining industries, total.....	1,139,153	494,389	349,482	88,363	206,919	233,451	8,251	225,200	(X)	(X)	(X)	(X)
11	Anthracite mining, total....	131,082	35,874	63,919	22,230	9,059	15,111	939	14,172	(X)	(X)	(X)	(X)
1111	Anthracite.....	123,097	31,032	63,919	21,336	6,810	12,651	939	11,712	18,353	155,899	-	-
1112	Anthracite mining services	7,985	4,842	(X)	894	2,249	2,460	-	2,460	(X)	15,538	(X)	87
12	Bituminous coal and lignite mining, total.....	1,008,071	345,515	285,563	66,133	197,860	218,340	7,312	211,028	(X)	(X)	(X)	(X)
1211	Bituminous coal.....	991,083	373,536	(3)	64,742	190,805	210,835	7,302	203,533	458,301	2,059,046	201	688
1212	Lignite.....	6,915	32,292	(3)	287	4,336	4,633	10	4,623	4,984	31,640	-	-
1213	Bituminous coal and lignite mining services..	10,073	6,250	(X)	1,104	2,719	2,872	-	2,872	(X)	23,575	(X)	185
	Northeast region (Pennsylvania):												
11	Anthracite mining, total.....	131,082	35,874	63,919	22,230	9,059	15,111	939	14,172	(X)	(X)	(X)	(X)
1111	Anthracite.....	123,097	31,032	63,919	21,336	6,810	12,651	939	11,712	18,353	155,899	(X)	-
1112	Anthracite mining services...	7,985	4,842	(X)	894	2,249	2,460	-	2,460	(X)	15,538	(X)	87
12	Bituminous coal mining, total...	210,082	83,324	68,156	21,596	37,006	44,715	1,201	43,514	(X)	(X)	(X)	(X)
1211	Bituminous coal.....	206,899	81,092	68,156	21,376	36,275	43,874	1,201	42,673	471,886	4362,593	(4)	(4)
1213	Bituminous coal mining services.....	3,183	2,232	(X)	220	731	841	-	841	(X)	57,149	(X)	(5)
12	East North Central division, total:												
1211	Bituminous coal mining, total...	181,860	88,928	32,731	6,803	53,398	55,908	1,410	54,498	(X)	(X)	(X)	(X)
1213	Bituminous coal.....	180,805	88,332	32,731	6,747	52,995	55,490	1,410	54,080	4105,926	4400,935	(4)	(4)
1213	Bituminous coal mining services.....	1,055	596	-	56	403	418	-	418	(X)	3,235	(X)	(5)
	Ohio:												
12	Bituminous coal mining, total...	84,034	38,314	21,544	4,851	19,325	22,109	804	21,305	(X)	(X)	(X)	(X)
1211	Bituminous coal.....	83,056	37,764	21,544	4,800	18,948	21,719	804	20,915	38,312	144,455	153	525
1213	Bituminous coal mining services.....	978	550	-	51	377	390	-	390	(X)	2,882	(X)	(5)
	Indiana:												
12	Bituminous coal mining, total...	21,728	10,704	-	585	10,439	9,868	137	9,731	(X)	(X)	(X)	(X)
1211	Bituminous coal.....	21,666	10,669	-	581	10,416	9,842	137	9,705	415,216	457,593	(4)	(4)
	Illinois:												
12	Bituminous coal mining.....	76,098	39,910	11,187	1,367	23,634	23,931	469	23,462	(X)	(X)	(X)	(X)
1211	Bituminous coal.....	76,083	39,899	11,187	1,366	23,631	23,929	469	23,460	52,245	198,362	-	-
1211	West North Central division: Bituminous coal.....	11,967	3,972	-	157	7,838	6,897	50	6,847	5,595	22,959	-	-
12	South Atlantic division:												
1211	Bituminous coal mining, total...	354,355	177,206	107,652	21,758	47,739	60,338	2,477	57,861	(X)	(X)	(X)	(X)
1211	Bituminous coal.....	350,067	174,802	107,652	20,990	46,623	59,289	2,477	56,812	164,232	778,470	-	-
1213	Bituminous coal mining services.....	4,288	2,404	-	768	1,116	1,049	-	1,049	(X)	8,979	(X)	-
1211	Maryland (bituminous coal).....	2,063	31,506	(3)	93	464	587	26	561	1,197	4,617	-	-
	Virginia:												
12	Bituminous coal mining, total...	70,724	356,969	(3)	6,935	6,820	9,417	352	9,065	(X)	(X)	(X)	(X)
1211	Bituminous coal.....	68,131	355,678	(3)	6,304	6,149	8,807	352	8,455	30,816	129,289	-	-
1213	Bituminous coal mining services.....	2,593	1,291	-	631	671	610	-	610	(X)	4,462	(X)	-
	West Virginia:												
12	Bituminous coal mining, total...	281,564	150,711	75,668	14,730	40,455	50,334	2,099	48,235	(X)	(X)	(X)	(X)
1211	Bituminous coal.....	279,869	149,598	75,668	14,593	40,010	49,895	2,099	47,796	132,213	644,543	-	-
1312	Bituminous coal mining services.....	1,695	1,113	-	137	445	439	-	439	(X)	4,517	(X)	-
12	East South Central division, total:												
1211	Bituminous coal mining, total...	206,795	86,628	66,385	11,887	41,895	37,766	1,306	36,460	(X)	(X)	(X)	(X)
1211	Bituminous coal.....	205,851	86,156	66,385	11,833	41,477	37,264	1,306	35,958	96,049	410,155	-	-
1213	Bituminous coal mining services.....	944	472	-	54	418	502	-	502	(X)	2,155	(X)	-
	Kentucky:												
12	Bituminous coal mining, total...	163,580	60,096	59,946	8,369	35,169	29,726	788	28,938	(X)	(X)	(X)	(X)
1211	Bituminous coal.....	163,266	60,015	59,946	8,365	34,940	29,420	788	28,632	76,457	293,931	-	-
1213	Bituminous coal mining services.....	314	81	-	4	229	306	-	306	(X)	550	(X)	20
	Tennessee:												
12	Bituminous coal mining, total...	10,153	64,981	61,917	855	2,400	3,206	166	3,040	(X)	(X)	(X)	(X)
1211	Bituminous coal.....	10,043	64,903	61,917	855	2,368	3,174	166	3,008	6,413	25,087	-	-
1213	Bituminous coal mining services.....	110	78	-	-	32	32	-	32	(X)	261	(X)	-

See footnotes at end of table.



**TABLE 2B. Selected Expenditures and Net Shipments of Primary Products, by Industry,  
for Selected Geographic Areas: 1963—Continued**

Ind. code	Industry and geographic area	Selected expenses					Capital expenditures			Net shipments of primary products or receipts for primary services by establishments classified in--			
		Total	Supplies, purchases for resale, and purchased energy	Coal received for preparation	Contract or sub-contract work	Purchased machinery installed	Total	Development and exploration of mineral property	Plant and other construction, machinery, and equipment	The industry		Other mineral industries	
										Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
	East South Central division--Con.												
	Alabama:												
12	Bituminous coal mining, total...	33,062	<sup>6</sup> 21,396	<sup>6</sup> 4,677	2,663	4,326	4,834	352	4,482	(X)	(X)	(X)	(X)
1211	Bituminous coal.....	32,542	<sup>6</sup> 21,083	<sup>6</sup> 4,677	2,613	4,169	4,670	352	4,318	13,179	91,137	-	-
1213	Bituminous coal mining services.....	520	313	-	50	157	164	-	164	(X)	1,344	(X)	-
1211	West South Central division: Bituminous coal.....	2,688	1,663	-	291	734	820	45	775	1,242	7,306	-	-
1211	Arkansas (bituminous coal).....	493	288	-	44	161	313	8	305	227	1,528	-	-
1211	Oklahoma (bituminous coal).....	2,195	1,375	-	247	573	507	37	470	1,015	5,778	-	-
12	Mountain division: Bituminous coal and lignite mining.....	31,204	<sup>2</sup> 23,681	( <sup>3</sup> )	3,201	4,322	6,339	542	5,797	(X)	(X)	(X)	(X)
1211	Bituminous coal.....	30,603	<sup>2</sup> 23,114	( <sup>3</sup> )	3,194	4,295	6,290	542	5,748	13,518	69,916	-	-
12	Wyoming: Bituminous coal mining, total...	3,359	(D)	-	(D)	123	251	7	244	(X)	(X)	(X)	(X)
1211	Bituminous coal.....	2,951	(D)	-	(D)	115	243	7	236	3,149	8,893	-	-
1213	Bituminous coal mining services.....	408	400	-	-	8	8	-	8	(X)	1,492	(X)	-
1211	Colorado (bituminous coal).....	6,874	(D)	-	(D)	1,635	2,311	27	2,284	3,972	23,513	-	-
1211	Utah (bituminous coal).....	17,654	<sup>3</sup> 16,050	( <sup>3</sup> )	222	1,382	1,778	241	1,537	4,379	30,473	-	-
12	Pacific division: Bituminous coal and lignite mining.....	2,277	1,552	-	154	571	915	271	644	(X)	(X)	(X)	(X)
1211	Bituminous coal.....	2,203	1,481	-	154	568	911	271	640	1,055	7,400	-	-
1211	Alaska (bituminous coal).....	1,791	1,153	-	71	567	906	271	635	856	5,894	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Represents expenditures during the year for both new and used plant and equipment.

<sup>2</sup>Represents gross shipments of coal indicated by the industry name less coal transferred to other establishments for preparation.

<sup>3</sup>Figures for the cost of coal received for preparation are included with those for the cost of supplies, purchases for resale, and purchased energy.

<sup>4</sup>Figures for coal produced by establishments classified in other industries are included with those for coal produced by establishments classified in the coal industries.

<sup>5</sup>Figures for primary services performed in other mineral industries are included with those for primary services performed in the coal mining services industries.

<sup>6</sup>The cost of purchases for resale is included with the cost of coal received for preparation.

Table 2C. Selected Statistics for the Coal Mining Industries, Except Service Industries, by Type of Operation and Selected Geographic Areas: 1963

Industry code, industry group, or industry, and item	All types of estab- lishments. total	Producing establishments										Nonproducing establis- ments
		Total	Mines only				Mines with preparation plants				Separately operated prepara- tion plants	
			Total	Underground mines	Strip-pit mines	Combina- tion methods and other methods	Total	Underground mines	Strip-pit mines	Combina- tion methods and other methods		
United States:												
Establishments.....number..	7,200	7,156	5,596	4,695	674	227	1,306	741	379	186	254	44
Employees.....do....	143,250	143,091	47,068	37,074	6,187	3,807	87,679	62,693	12,563	12,423	3,861	159
Value added in mining.....\$1,000..	1,700,435	1,699,805	420,466	273,184	96,667	50,615	1,223,465	779,730	266,776	176,959	55,874	630
1111.—Anthracite:												
Establishments.....number..	1,026	1,021	869	748	82	39	73	10	14	49	79	5
Employees.....do....	10,692	10,682	4,093	2,509	938	646	4,901	672	738	3,491	1,190	10
Value added in mining....\$1,000..	110,527	110,545	42,930	23,048	12,526	7,356	53,137	3,674	9,574	39,889	14,478	(2)
1211.—Bituminous coal:												
Establishments.....number..	6,115	6,078	4,696	3,938	570	188	1,208	730	341	137	174	37
Employees.....do....	132,046	132,409	42,912	34,560	5,191	3,161	82,778	62,021	11,381	8,932	2,671	3149
Value added in mining....\$1,000..	1,578,078	1,589,260	376,740	250,107	83,374	43,259	1,170,328	776,056	246,207	137,070	41,396	3648
1212.—Lignite:												
Establishments.....number..	59	57	31	9	22	-	25	1	24	-	1	2
Employees.....do....	512	(3)	63	5	58	-	(3)	(3)	444	-	(3)	(3)
Value added in mining....\$1,000..	11,830	(3)	796	29	767	-	(3)	(3)	10,995	-	(3)	(3)
Geographic Area												
Northeast region (Pennsylvania):												
Establishments.....number..	2,200	2,187	1,777	1,378	316	83	301	108	102	91	109	13
Employees.....do....	434,649	434,617	11,858	8,063	2,776	1,019	19,540	11,983	2,710	4,847	1,693	32
Value added in mining....\$1,000..	386,367	387,465	120,284	71,612	36,043	12,629	246,274	153,660	36,280	56,334	20,907	(2)
1111.—Anthracite:												
Establishments.....number..	1,026	1,021	869	748	82	39	73	10	14	49	79	5
Employees.....do....	410,692	410,682	4,093	2,509	938	646	4,901	672	738	3,491	1,190	10
Value added in mining..\$1,000..	110,527	110,545	42,930	23,048	12,526	7,356	53,137	3,674	9,574	39,889	14,478	(2)
1211.—Bituminous coal:												
Establishments.....number..	1,174	1,166	908	630	234	44	228	98	88	42	30	8
Employees.....do....	23,957	23,935	7,765	5,554	1,838	373	14,639	11,311	1,972	1,356	503	22
Value added in mining....\$1,000..	275,840	276,920	77,354	48,564	23,517	5,273	193,137	149,986	26,706	16,445	6,429	(2)
East North Central division, total:												
Establishments.....number..	554	547	318	163	124	31	221	83	115	23	8	7
Employees.....do....	20,263	20,236	3,508	1,594	1,523	391	15,516	8,787	5,717	1,012	363	29
Value added in mining..\$1,000..	307,782	306,229	45,503	10,782	26,709	8,012	255,327	105,687	130,142	19,498	5,399	1,553
Ohio:												
Establishments.....number..	382	380	257	137	90	30	115	31	63	21	8	2
Employees.....do....	8,316	(D)	(D)	1,145	1,164	(D)	(D)	(D)	1,675	(D)	363	(D)
Value added in mining..\$1,000..	104,869	(D)	(D)	7,422	17,386	(D)	(D)	(D)	25,048	(D)	5,399	(D)
Indiana:												
Establishments.....number..	69	66	35	18	17	-	31	15	15	1	-	3
Employees.....do....	2,959	2,952	219	84	135	-	2,595	(D)	1,075	(D)	-	7
Value added in mining..\$1,000..	45,969	44,672	3,748	464	3,284	-	40,924	(D)	25,480	(D)	-	1,297
Illinois:												
Establishments.....number..	103	101	26	8	17	1	75	37	37	1	-	2
Employees.....do....	8,988	(D)	(D)	365	224	(D)	(D)	5,021	2,967	(D)	-	(D)
Value added in mining..\$1,000..	156,944	(D)	(D)	2,896	6,039	(D)	(D)	65,072	79,614	(D)	-	(D)
West North Central division (bituminous coal only):												
Establishments.....number..	85	84	43	21	22	-	41	9	32	-	-	1
Employees.....do....	1,675	(D)	187	78	109	-	(D)	(D)	732	-	-	(D)
Value added in mining..\$1,000..	17,927	(D)	3,360	485	2,875	-	(D)	(D)	14,219	-	-	(D)
Missouri:												
Establishments.....number..	35	35	18	7	11	-	17	4	13	-	-	-
Employees.....do....	1,137	1,137	121	(D)	(D)	-	1,016	(D)	(D)	-	-	-
Value added in mining..\$1,000..	(D)	(D)	2,620	(D)	(D)	-	(D)	(D)	(D)	-	-	-
Kansas:												
Establishments.....number..	14	14	7	1	6	-	7	1	6	-	-	-
Employees.....do....	264	264	(D)	(D)	(D)	-	249	(D)	(D)	-	-	-
Value added in mining..\$1,000..	(D)	(D)	(D)	(D)	(D)	-	(D)	(D)	(D)	-	-	-
South Atlantic division:												
Establishments.....number..	2,390	2,381	2,020	1,878	84	58	288	217	23	48	73	9
Employees.....do....	53,061	53,022	19,560	17,604	771	1,185	31,488	26,074	299	5,115	1,014	39
Value added in mining..\$1,000..	602,800	602,812	152,341	126,833	9,561	15,947	434,968	349,478	4,423	81,067	15,503	(2)
Maryland:												
Establishments.....number..	64	64	55	38	16	1	8	3	5	-	1	-
Employees.....do....	413	413	296	(D)	65	(D)	103	(D)	(D)	-	(D)	-
Value added in mining..\$1,000..	3,709	3,709	2,438	(D)	944	(D)	1,097	(D)	(D)	-	(D)	-

Table 2C. **Selected Statistics for the Coal Mining Industries, Except Service Industries, by Type of Operation and Selected Geographic Areas: 1963—Continued**

Industry code, industry group, or industry, and item	All types of estab- lishments, total	Producing establishments									Nonproducing establish- ments	
		Total	Mines only				Mines with preparation plants					Separately operated prepara- tion plants
			Total	Underground mines	Strip-pit mines	Combina- tion methods and other methods	Total	Underground mines	Strip-pit mines	Combina- tion methods and other methods		
Geographic Area—Continued												
South Atlantic division—Continued												
Virginia:												
Establishments.....number..	769	769	692	663	15	14	52	44	1	7	25	-
Employees.....do....	11,349	11,349	(D)	6,706	140	(D)	(D)	2,386	(D)	1,274	(D)	-
Value added in mining..\$1,000..	95,639	95,639	(D)	37,133	1,454	(D)	(D)	26,388	(D)	22,604	(D)	-
West Virginia:												
Establishments.....number..	1,554	1,545	1,271	1,175	53	43	227	169	17	41	47	9
Employees.....do....	41,293	41,254	12,226	10,724	566	936	27,707	23,649	217	3,841	686	39
Value added in mining..\$1,000..	503,435	503,447	108,915	88,830	7,163	12,922	384,411	322,545	3,403	58,463	10,121	(2)
East South Central division, total:												
Establishments.....number..	1,658	1,655	1,282	1,150	79	53	311	233	55	23	62	3
Employees.....do....	28,240	28,236	(D)	9,477	848	(D)	(D)	12,636	1,834	(D)	(D)	4
Value added in mining..\$1,000..	307,202	307,207	(D)	61,558	19,347	(D)	(D)	128,765	51,643	(D)	(D)	(2)
Kentucky:												
Establishments.....number..	1,194	1,192	924	848	29	47	215	164	33	18	53	2
Employees.....do....	20,740	(D)	9,727	8,123	423	1,181	(D)	8,057	1,315	(D)	692	(D)
Value added in mining..\$1,000..	219,303	(D)	79,736	53,141	13,054	13,541	(D)	71,878	43,149	(D)	11,248	(D)
Tennessee:												
Establishments.....number..	271	270	234	201	28	5	30	20	8	2	6	1
Employees.....do....	1,835	(D)	(D)	619	(D)	(D)	(D)	(D)	162	(D)	(D)	(D)
Value added in mining..\$1,000..	20,146	(D)	(D)	4,050	(D)	(D)	(D)	(D)	3,232	(D)	(D)	(D)
Alabama:												
Establishments.....number..	193	193	124	101	22	1	66	49	14	3	3	-
Employees.....do....	5,665	5,665	(D)	735	(D)	(D)	4,597	(D)	357	(D)	(D)	-
Value added in mining..\$1,000..	67,753	67,753	(D)	4,367	(D)	(D)	58,698	(D)	5,262	(D)	(D)	-
West South Central division (bituminous coal only):												
Establishments.....number..	40	39	25	12	13	-	14	4	10	-	-	1
Employees.....do....	453	(D)	(D)	38	(D)	-	380	127	253	-	-	(D)
Value added in mining..\$1,000..	5,513	(D)	(D)	334	(D)	-	5,019	689	4,330	-	-	(D)
Oklahoma:												
Establishments.....number..	23	22	14	7	7	-	8	1	7	-	-	1
Employees.....do....	346	(D)	(D)	16	(D)	-	313	(D)	(D)	-	-	(D)
Value added in mining..\$1,000..	4,165	(D)	(D)	90	(D)	-	4,036	(D)	(D)	-	-	(D)
Mountain division (bituminous coal only):												
Establishments.....number..	195	190	92	81	9	2	97	83	14	-	1	5
Employees.....do....	3,771	3,735	(D)	210	64	(D)	3,370	2,976	394	-	(D)	36
Value added in mining..\$1,000..	54,864	54,700	(D)	1,529	1,103	(D)	50,522	40,685	9,837	-	(D)	164
Wyoming:												
Establishments.....number..	18	18	6	4	2	-	12	4	8	-	-	-
Employees.....do....	304	304	9	(D)	(D)	-	295	105	190	-	-	-
Value added in mining..\$1,000..	6,185	6,185	76	(D)	(D)	-	6,109	531	5,578	-	-	-
Colorado:												
Establishments.....number..	100	99	50	45	3	2	49	46	3	-	-	1
Employees.....do....	1,374	(D)	115	107	(D)	(D)	1,245	1,155	90	-	-	(D)
Value added in mining..\$1,000..	19,470	(D)	933	841	(D)	(D)	18,539	16,402	2,137	-	-	(D)
Utah:												
Establishments.....number..	36	34	8	8	-	-	25	25	-	-	1	2
Employees.....do....	1,726	(D)	55	55	-	-	1,565	1,565	-	-	(D)	(D)
Value added in mining..\$1,000..	23,337	(D)	494	494	-	-	(D)	(D)	-	-	(D)	(D)
Pacific division (bituminous coal only):												
Establishments.....number..	19	16	8	3	5	-	8	3	4	1	-	3
Employees.....do....	387	(D)	(D)	5	(D)	-	(D)	(D)	180	(D)	-	(D)
Value added in mining..\$1,000..	6,150	(D)	(D)	22	(D)	-	(D)	(D)	4,907	(D)	-	(D)
Alaska:												
Establishments.....number..	10	8	4	-	4	-	4	-	4	-	-	2
Employees.....do....	194	(D)	(D)	-	(D)	-	180	-	180	-	-	(D)
Value added in mining..\$1,000..	5,009	(D)	(D)	-	(D)	-	4,907	-	4,907	-	-	(D)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

Includes employees at central office and related facilities which were not distributed by detailed types of operation.

Not shown since the cost of supplies, purchased fuel and electric energy, contract work, and purchased machinery installed exceeds capital expenditures.

Figures for the Lignite Industry are included with those for the Bituminous Coal Industry.

Includes data for central offices and related facilities in the Anthracite Industry in New York.

TABLE 3. Detailed Statistics: 1963

Item	Coal mining industries, total	11.--Anthracite mining			12.--Bituminous coal and lignite mining			
		Total	1111.--Anthracite	1112.--Anthracite mining services	Total	1211.--Bituminous coal	1212.--Lignite	1213.--Bituminous coal and lignite mining services
Operating companies.....number..	6,863	1,025	987	41	5,838	5,663	52	131
Establishments, total.....do....	7,374	1,069	1,026	43	6,305	6,115	59	131
With 0 to 19 employees.....do....	6,106	967	941	26	5,139	4,972	53	114
With 20 to 99 employees.....do....	963	89	73	16	874	851	6	17
With 100 or more employees.....do....	305	13	12	1	292	292	-	-
Including mines, culm banks, or dredges.....do....	6,945	946	946	-	5,999	5,941	58	-
Including preparation plants.....do....	1,598	153	153	-	1,445	1,419	26	-
Net production of coal, total.....1,000 short tons..	482,376	18,388	18,388	(1)	463,988	458,999	4,989	(1)
From underground operations.....do....	312,311	6,918	6,918	-	305,393	305,379	14	-
From strip-pit operations, total.....do....	154,828	7,691	7,691	(1)	147,137	142,162	4,975	(1)
Mined by same company.....do....	146,018	5,310	5,310	(1)	140,708	135,733	4,975	(1)
Mined by outside contractor.....do....	8,810	2,381	2,381	(1)	6,429	6,429	-	(1)
From auger operations, total.....do....	11,419	-	-	-	11,419	11,419	-	(1)
Mined by same company.....do....	9,360	-	-	-	9,360	9,360	-	(1)
Mined by outside contractor.....do....	2,059	-	-	-	2,059	2,059	-	(1)
From culm-bank operations, total.....do....	3,084	3,084	3,084	(1)	-	-	-	-
Mined by same company.....do....	2,285	2,285	2,285	(1)	-	-	-	-
Mined by outside contractor.....do....	799	799	799	(1)	-	-	-	-
From dredge operations.....do....	734	695	695	-	39	39	-	(1)
Net shipments of coal, total.....do....	482,638	18,353	18,353	(1)	464,285	459,301	4,984	(1)
Raw coal sold for use without preparation.....do....	66,764	981	981	(1)	65,783	65,418	365	(1)
Prepared coal.....do....	415,874	17,372	17,372	(1)	398,502	393,883	4,619	(1)
Value of shipments and receipts, total.....\$1,000..	2,632,930	236,511	220,973	15,538	2,396,419	2,358,326	14,112	23,981
Raw coal transferred to other establishments for preparation and coal resales.....do....	360,145	64,447	64,447	-	295,698	295,161	131	406
Net shipments and receipts, total.....do....	2,272,785	172,064	156,526	15,538	2,100,721	2,063,165	13,981	23,575
Coal net shipments.....do....	2,228,585	155,899	155,899	-	2,072,686	2,059,046	13,640	-
Other products and services.....do....	44,200	16,165	627	15,538	28,035	4,119	341	23,575
Value added in mining.....do....	1,727,228	120,540	110,527	10,013	1,606,688	1,578,078	11,830	16,780
Persons in industry, total.....number..	151,609	13,159	12,047	1,112	138,450	136,458	557	1,435
Production, development, and exploration workers, average for year.....do....	128,953	10,324	9,331	993	118,629	116,975	441	1,213
All other employees.....do....	16,695	1,462	1,361	101	15,233	15,071	71	91
Proprietors and firm numbers.....do....	5,961	1,373	1,355	18	4,588	4,412	45	131
Performing manual labor.....do....	5,081	1,307	1,291	16	3,774	3,620	45	109
Man-hours worked by production, development, and exploration workers, total.....1,000..	237,186	19,544	17,758	1,786	217,642	214,421	884	2,337
At mines, total.....do....	211,664	15,077	13,291	1,786	196,587	193,555	695	2,337
Underground.....do....	152,560	7,458	7,403	55	145,102	144,694	11	2397
Strip-pit, auger, culm-bank, and dredge.....do....	36,679	5,684	3,973	21,711	30,995	28,869	502	21,624
Surface (including mine shops and yards).....do....	22,425	1,935	1,915	20	20,490	19,992	182	2316
At preparation plants.....do....	25,522	4,467	4,467	-	21,055	20,866	189	-
Man-hours spent on development and exploration work (included above).....do....	4,072	1,064	1,064	-	3,008	2,592	40	376
Principal expenses designated below, total.....\$1,000..	1,753,332	180,858	169,309	11,549	1,572,474	1,552,769	5,339	14,366
Wages of production, development, and exploration workers.....do....	700,844	49,889	44,867	5,022	650,955	642,338	2,245	6,372
Salaries of all other employees.....do....	120,254	8,946	8,155	791	111,308	110,153	515	640
Supplies.....do....	396,739	26,753	23,071	3,682	369,986	364,255	1,788	4,906
Raw coal received for preparation.....do....	349,482	63,919	63,919	(X)	285,563			(X)
Coal received for resale without further processing.....do....	10,878	403	403	-	10,475	10,123	-	352
Purchased fuels consumed.....do....	24,277	2,947	2,117	830	21,330	19,804	200	1,326
Purchased electric energy.....do....	62,495	5,771	5,441	330	56,724	56,354	304	66
Contract work.....do....	88,363	22,230	21,336	894	66,133	64,742	287	1,104
Purchased machinery installed.....do....	206,919	9,059	6,810	2,249	197,860	190,805	4,336	2,719
Capital expenditures, total.....do....	233,451	15,111	12,651	2,460	218,340	210,835	4,633	2,872
Development and exploration of mineral property.....do....	8,251	939	939	-	7,312	7,302	10	-
Preparation plant and other construction.....do....	42,621	4,177	4,159	18	38,444	38,055	247	142
New machinery and equipment.....do....	160,301	8,065	6,270	1,795	152,236	145,668	4,316	2,252
Used plant and equipment.....do....	22,278	1,930	1,283	647	20,348	19,810	60	478

See footnotes at end of table.

TABLE 3. Detailed Statistics: 1963—Continued

Item	Coal mining industries, total	11.--Anthracite mining			12.--Bituminous coal and lignite mining			
		Total	1111.--Anthracite	1112.--Anthracite mining services	Total	1211.--Bituminous coal	1212.--Lignite	1213.--Bituminous coal and lignite mining services
Energy used.....million kwh. equivalent..	13,763	2,692	2,442	250	16,071	15,598	140	333
Coal produced and used at same establishment for power or heat.....1,000 short tons..	786	153	153	-	633	627	6	-
Fuel purchased:								
Coal.....do....	99	26	26	(2)	73	73	-	(2)
Distillate fuel oil.....1,000 barrels..	2,299	306	207	99	1,993	1,827	22	144
Residual fuel oil.....do....	263	40	33	7	223	217	4	2
Gas.....million cu. ft..	984	2	-	2	982	972	10	-
Gasoline.....1,000 gallons..	29,146	5,534	4,863	671	23,612	22,211	334	1,067
Other fuels and undistributed.....\$1,000..	3,104	448	321	127	2,656	2,470	21	165
Electric energy purchased.....million kwh..	5,390	376	359	17	5,014	4,997	14	3
Electric energy generated and used.....do....	105	58	58	-	47	47	-	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	7,005	704	581	123	6,301	6,070	76	155
Per production worker.....hp..	54	68	62	124	53	52	172	128
Prime movers.....1,000 hp..	2,937	362	257	105	2,575	2,382	45	148
Electric motors driven by purchased energy.....do....	4,068	342	324	18	3,726	3,688	31	7
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	97	42	41	1	55	55	(2)	(2)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

(2) Less than one-half of the unit of measure specified.

<sup>1</sup>Coal mined by the Mining Services Industries is included in the production shown for the coal industries.

<sup>2</sup>Services establishments were requested to report man-hours by kind of work performed rather than by department. The man-hours so reported have been allocated to the mine department where the service was performed. Thus "Underground" man-hours represent such services as drilling, rock work, timbering, shaft sinking, and mine tunneling; "Strip-pit, auger, culm-bank, and dredge" man-hours represent stripping overburden, strip-pit mining, auger mining, and loading culm-bank material; and "Surface" man-hours represent excavating, shop work, hauling from mine to tipple, and other miscellaneous services.

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963

Industry, item, and geographic area	All establishments, total	Establishments with an average of--									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
United States, total:											
Coal mining industries:											
Establishments.....number..	7,374	3,805	1,234	1,067	727	236	198	92	13	2	-
All employees:											
Total.....do.....	<sup>1</sup> 145,648	5,494	8,243	14,369	22,041	16,409	30,735	<sup>2</sup> 34,237	<sup>2</sup> 9,637	( <sup>2</sup> )	-
Payroll.....\$1,000..	<sup>1</sup> 821,098	17,621	27,735	55,496	99,288	95,196	203,636	<sup>2</sup> 225,304	<sup>2</sup> 62,092	( <sup>2</sup> )	-
Production, development, and exploration workers:											
Total.....number..	128,953	5,400	7,222	13,203	20,195	15,000	28,143	<sup>2</sup> 31,115	<sup>2</sup> 8,675	( <sup>2</sup> )	-
Man-hours.....1,000..	237,186	8,009	11,547	22,763	36,275	28,830	54,496	<sup>2</sup> 59,486	<sup>2</sup> 15,780	( <sup>2</sup> )	-
Wages.....\$1,000..	700,844	17,369	24,950	51,022	89,942	85,514	182,036	<sup>2</sup> 196,771	<sup>2</sup> 53,240	( <sup>2</sup> )	-
Value added in mining.....do.....	1,727,228	58,254	65,692	124,059	216,797	222,391	455,789	<sup>2</sup> 463,113	<sup>2</sup> 121,133	( <sup>2</sup> )	-
Value of shipments and receipts.....do.....	2,632,930	98,274	117,266	198,558	367,312	391,275	661,549	<sup>2</sup> 637,122	<sup>2</sup> 161,574	( <sup>2</sup> )	-
Capital expenditures.....do.....	233,451	21,606	17,972	22,982	40,928	28,541	63,936	<sup>2</sup> 33,025	<sup>2</sup> 4,461	( <sup>2</sup> )	-
11.—Anthracite mining:											
Establishments.....number..	1,069	732	127	108	62	27	7	5	-	1	-
All employees:											
Total.....do.....	<sup>1</sup> 11,786	543	839	1,430	1,907	1,874	1,082	<u>3,613</u>	-	(D)	-
Payroll.....\$1,000..	<sup>1</sup> 58,835	1,688	3,062	6,508	9,537	9,956	5,562	<u>19,596</u>	-	(D)	-
Production, development, and exploration workers:											
Total.....number..	10,324	534	736	1,296	1,745	1,714	994	<u>3,305</u>	-	(D)	-
Man-hours.....1,000..	19,544	888	1,306	2,445	3,239	3,140	1,798	<u>6,728</u>	-	(D)	-
Wages.....\$1,000..	49,889	1,670	2,761	5,912	8,539	8,858	5,015	<u>17,134</u>	-	(D)	-
Value added in mining.....do.....	120,540	10,527	7,551	13,726	20,591	21,452	10,953	<u>35,740</u>	-	(D)	-
Value of shipments and receipts.....do.....	236,511	18,285	13,924	27,444	46,795	53,879	26,059	<u>50,125</u>	-	(D)	-
Capital expenditures.....do.....	15,111	3,604	1,371	4,189	2,966	1,794	364	<u>823</u>	-	(D)	-
12.—Bituminous coal and lignite mining:											
Establishments.....number..	6,305	3,073	1,107	959	665	209	191	87	13	1	-
All employees:											
Total.....do.....	<sup>1</sup> 133,862	4,951	7,404	12,939	20,134	14,535	29,653	30,624	<u>9,637</u>	(D)	-
Payroll.....\$1,000..	<sup>1</sup> 762,263	15,933	24,673	48,988	89,751	85,240	198,074	205,708	<u>62,092</u>	(D)	-
Production, development, and exploration workers:											
Total.....number..	118,629	4,866	6,486	11,907	18,450	13,286	27,149	27,810	<u>8,675</u>	(D)	-
Man-hours.....1,000..	217,642	7,121	10,241	20,318	33,036	25,690	52,698	52,758	<u>15,780</u>	(D)	-
Wages.....\$1,000..	650,955	15,699	22,189	45,110	81,403	76,656	177,021	179,637	<u>53,240</u>	(D)	-
Value added in mining.....do.....	1,606,688	47,727	58,141	110,333	196,206	200,939	444,836	427,373	<u>121,133</u>	(D)	-
Value of shipments and receipts.....do.....	2,396,419	79,989	103,342	171,114	320,517	337,396	635,490	586,997	<u>161,574</u>	(D)	-
Capital expenditures.....do.....	218,340	18,002	16,601	18,793	37,962	26,747	63,572	32,202	<u>4,461</u>	(D)	-
NUMBER OF ESTABLISHMENTS, BY—											
Industry											
Anthracite mining, total.....	1,069	732	127	108	62	27	7	5	-	1	-
Anthracite.....	1,026	723	119	99	53	20	6	5	-	1	-
Anthracite mining services.....	43	9	8	9	9	7	1	-	-	-	-
Bituminous coal and lignite mining, total.....	6,305	3,073	1,107	959	665	209	191	87	13	1	-
Bituminous coal.....	6,115	2,974	1,070	928	649	202	191	87	13	1	-
Lignite.....	59	42	6	5	3	3	-	-	-	-	-
Bituminous coal mining services.....	131	57	31	26	13	4	-	-	-	-	-
Geographic area <sup>3</sup>											
Northeast region:											
Pennsylvania:											
Anthracite mining.....	1,069	732	127	108	62	27	7	5	-	1	-
Bituminous coal mining.....	1,214	659	222	142	104	43	20	21	2	1	-
East North Central division, total.....	575	227	79	99	78	34	43	12	3	-	-
Ohio.....	397	175	62	77	51	16	11	5	-	-	-
Indiana.....	72	28	12	12	3	6	9	2	-	-	-
Illinois.....	106	24	5	10	24	12	23	5	3	-	-
West North Central division, total.....	132	78	25	12	9	6	2	-	-	-	-
Iowa.....	39	17	13	6	3	-	-	-	-	-	-
Missouri.....	35	20	6	3	2	3	1	-	-	-	-
North Dakota (lignite).....	43	32	4	2	3	2	-	-	-	-	-
South Dakota (lignite).....	1	-	1	-	-	-	-	-	-	-	-
Kansas.....	14	9	1	1	1	1	1	-	-	-	-
South Atlantic division, total.....	2,428	1,068	469	440	261	67	82	36	5	-	-
Maryland.....	64	42	9	9	3	1	-	-	-	-	-
Virginia.....	775	267	191	188	98	21	8	1	1	-	-
West Virginia.....	1,586	757	268	243	160	45	74	35	4	-	-
Georgia.....	3	2	1	-	-	-	-	-	-	-	-
East South Central division, total.....	1,674	877	273	242	182	44	37	17	2	-	-
Kentucky.....	1,203	595	211	175	148	32	30	11	1	-	-
Tennessee.....	274	192	32	33	10	4	3	-	-	-	-
Alabama.....	197	90	30	34	24	8	4	6	1	-	-
West South Central division, total.....	47	28	3	8	4	3	1	-	-	-	-
Arkansas.....	18	11	1	5	1	-	-	-	-	-	-
Oklahoma.....	26	17	2	1	3	2	1	-	-	-	-
Texas (lignite).....	3	-	-	2	-	1	-	-	-	-	-

See footnotes at end of table.

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963—Continued

Industry, item, and geographic area	All establishments, total	Establishments with an average of--									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
NUMBER OF ESTABLISHMENTS, BY—Continued											
<u>Geographic Area</u> <sup>3</sup> —Continued											
Mountain division, total.....	213	124	32	15	25	10	5	1	1	-	-
Montana (bituminous coal and lignite).....	30	25	4	1	-	-	-	-	-	-	-
Wyoming.....	21	8	4	2	4	3	-	-	-	-	-
Colorado.....	100	65	12	7	10	5	-	1	-	-	-
New Mexico.....	21	13	5	-	1	-	2	-	-	-	-
Arizona.....	5	5	-	-	-	-	-	-	-	-	-
Utah.....	36	8	7	5	10	2	3	-	1	-	-
Pacific division, total.....	22	12	4	1	2	2	1	-	-	-	-
Washington.....	11	7	1	1	1	-	1	-	-	-	-
California (lignite).....	1	-	1	-	-	-	-	-	-	-	-
Alaska.....	10	5	2	-	1	2	-	-	-	-	-

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.

<sup>1</sup>Includes data for separately reported central offices and related facilities.<sup>2</sup>Data for one anthracite establishment are included in size class "250-499 employees" and for one bituminous coal establishment in size class "500-999 employees."<sup>3</sup>Bituminous coal mining, unless otherwise specified.

## ANTHRACITE MINING

This report shows 1963 Census of Mineral Industries statistics for establishments classified in SIC Major Group 11, Anthracite Mining. This major group covers establishments primarily engaged in producing anthracite (hard coal). The separate industries included in this group are as follows:

### SIC Code and Title

- 1111—Anthracite
- 1112—Anthracite Mining Services

### INDUSTRY DESCRIPTIONS

Industry 1111—Anthracite. This industry represents establishments primarily engaged in producing anthracite or in developing anthracite mines. All establishments in the United States that are classified in this industry are in Pennsylvania. This industry includes underground mines, stripping or culm bank operations by owners or lessees, dredge operations, and coal preparation plants (breakers, washeries, and screening plants) whether or not operated in conjunction with the mines served.

Industry 1112—Anthracite Mining Services. This industry represents establishments primarily engaged in overburden stripping and strip mining for fresh or culm bank anthracite for others on a contract, fee, or other basis and other establishments primarily engaged in performing anthracite mining services, such as drilling, mine tunnelling, shaft sinking, and pumping or draining mines. This industry is a combination of two industries, 1112, Anthracite Stripping Services, and 1113, Anthracite Mining Services, Except Stripping, for which separate figures were tabulated for years prior to 1963.

The production of fuel briquets and packaged fuel is classified in industry 2999, Petroleum and Coal Products, N.E.C., and the production of manufactured gas from coal in industry 4925, Mixed, Manufactured, or L.P. Gas Production and/or Distribution.

### SUMMARY OF FINDINGS

The combined value of shipments and receipts of the industries in Major Group 11 amounted to \$237 million. Of this total, the Anthracite Industry had shipments of \$221 million, including \$64 million for raw coal sold or transferred to other establishments in the industry for preparation and \$0.4 million for shipments of coal purchased and resold without further processing, or net shipments of \$157 million. The Anthracite Mining Services Industry, with receipts of \$16 million, accounted for the remainder.

Net shipments of anthracite amounted to 18 million tons. An additional 0.2 million tons of anthracite were mined and used at the same establishment for power or heat.

Net production, net shipment, and transfers for preparation. The figures for "net shipments" represent all prepared anthracite for shipment, sale, or employee use, including coal for stock, reported by breaker, washery, and dredge operators, plus raw anthracite sold for use without preparation. The net shipments figures exclude coal used at the



producing mine or preparation plant for power or heat. They also exclude the raw coal sold or transferred to other establishments for preparation, thus eliminating the duplication in "total" shipments which results from inclusion of the value of both the raw coal sold or transferred for preparation and the clean coal recovered therefrom. For individual counties, the net shipments figures include the prepared coal recovered from raw coal mined in other counties.

"Net production," on the other hand, represents the net tonnage of anthracite mined, excluding breaker, washery, and other refuse, based on the location of the mining operation. For individual counties the figures represent the net usable product from mines, culm banks, and dredges located within the boundaries of the designated area. At the mine level, the net production includes the tonnage of coal mined and prepared at the same establishment, coal used at the establishment for power or heat, the prepared or sized coal equivalent of raw coal mined for preparation at other establishments, and any raw coal sold for use without preparation.

For the Anthracite Industry, the net production index for primary products of the industry decreased to 62 in 1963 from the 1958 level of 75. The unit value index for 1963 was 103 compared to 106 in 1958. Both indexes were computed on a basis of 1954 = 100. For the Anthracite Mining Services Industry, the 1963 production index was only 34, compared with 75 for 1958; but the unit receipts for services index for 1963 was 108, compared with 106 for 1958.

Approximately 95 percent of all anthracite mined is prepared prior to use. The coal beds in the anthracite region are, in general, steeply pitching, and much folded and faulted. Steep-pitch mining makes it necessary to bring to the surface all material which is mined, including large quantities of slate and other refuse. About 30 million tons of raw coal were processed at preparation plants. Of this quantity, 13 million tons of raw coal were mined and prepared at the same establishment.

Contract work. Stripping of fresh-mined anthracite and loading of culm-bank material by contractors represent a significant component of anthracite mining. Anthracite operators reported a total of nearly 8 million tons of strip-pit coal produced, of which over 2 million tons were mined for them by contractors. Of the over 3 million tons of culm-bank coal produced, nearly one million tons were mined by contractors.

Establishments classified in the Anthracite Mining Services Industry reported receipts of over \$15 million for services performed at strip-pits and culm banks and \$0.2 million for services other than stripping or loading culm bank material. A total of 1,110 persons were engaged in these services, accounting for approximately 9 percent of the total number of persons engaged in the Anthracite Mining Industries.

Establishments classified in the Anthracite Mining Services Industry were permitted to file one report for all mining services performed in the United States. These reports were classified on the basis of the principal type of services performed and the principal industry served to determine their industry or subindustry classification. Each report included data on the amount received for services, the number of employees in March, the tonnage of raw anthracite mined, and capital expenditures during 1963, by State and county. For geographic area statistics, all other figures in each report were allocated on the basis of these reported data.

The figures in this report for the Anthracite Mining Services Industry cover, except for hauling, all types of service activities which represent an integral part of anthracite mining operations. Receipts by these contractors represent 70 percent of the total payments for contract services by the Anthracite Mining Industries. A small amount of additional contract work was done by operators of anthracite properties, presumably primarily for other anthracite operators and by contractors primarily serving other industries. These services probably represent nearly complete coverage of the types of contract service operations classified in the mineral industries.

Secondary production. The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the production of secondary products and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7 to 12) with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5 which shows the value of primary and secondary products shipped by establishments classified in the specified industry and also the value of net shipments of primary products of the industry produced as secondary products by establishments classified in other industries. However, secondary products and services in the Anthracite Industry amounted to less than 1 percent of the total value of shipments for the industry. All anthracite was produced in the Anthracite Industry, none being produced as a secondary product in other industries.

#### COMPARABILITY WITH BUREAU OF MINES STATISTICS

Some differences occur in the similar statistics prepared by the two agencies, arising principally from differences in methods followed and objectives sought. Some of the comparable product statistics of the two agencies are shown on page 11B-4. The reasons for such differences, to the extent that they pertain to statistics for the anthracite mining industries, are summarized below:

1. The Bureau of the Census excludes small establishments whose value of products and reported costs were less than \$500. The Bureau of Mines includes all establishments regardless of size. However, the contribution to product of such establishments is usually small.
2. The Bureau of Mines statistics on both production and shipments are based primarily on data reported by breakers, washeries, and dredges, but also include coal sold for use without preparation. The quantity and value of the coal so reported is then distributed among the counties from which the coal originated. Census Bureau statistics are based on an establishment basis and take into account the actual location and type of product of the establishment as reported by the respondent, making a distinction between "net production" and "net shipments." The Bureau of Mines statistics therefore are comparable by county only with the census statistics for "net production" and are not comparable with the census county figures for "net shipments."
3. Both agencies collect information on raw coal shipped for preparation as well as on the prepared product from such coal. Also, both agencies collect information on raw coal shipped to public utility, manufacturing, and other industrial plants. While such statistics are published separately by the Bureau of the Census, the Bureau of Mines publishes only the final product and includes the raw coal shipped for use outside the anthracite industry in its figures for breaker, washery, and dredge product.
4. Differences exist in establishment coverage in certain areas for both collection agencies.

## 1963 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Item	Bureau of the Census statistics			Bureau of Mines statistics		
	Net pro- duction (1,000 short tons)	Net shipments including inter- plant transfers		Net pro- duction (1,000 short tons)	Net shipments	
		Quantity (1,000 short tons)	Value (\$1,000)		Quantity (1,000 short tons)	Value (\$1,000)
United States, total.....	18,388	<sup>1</sup> 18,638 <sup>2</sup> 18,353	<sup>1</sup> 155,995 <sup>2</sup> 155,899	18,267	18,106	153,013
Selected Counties (Pennsylvania):						
Lackawanna.....	1,114	<sup>2</sup> 1,075	<sup>2</sup> 11,187	959	956	9,742
Luzerne.....	6,483	<sup>2</sup> 6,681	<sup>2</sup> 57,839	6,756	6,607	59,887
Northumberland.....	2,057	<sup>2</sup> 2,165	<sup>2</sup> 17,111	2,019	2,018	15,703
Schuylkill.....	6,751	<sup>2</sup> 7,040	<sup>2</sup> 61,223	6,529	6,522	55,189
Method of mining:						
Strip pit.....	7,691	(NA)	(NA)	7,468	(NA)	(NA)
Underground.....	6,918	(NA)	(NA)	6,715	(NA)	(NA)
Culm bank.....	3,084	(NA)	(NA)	3,393	(NA)	(NA)
Dredge.....	695	(NA)	(NA)	692	(NA)	(NA)

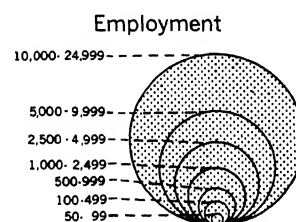
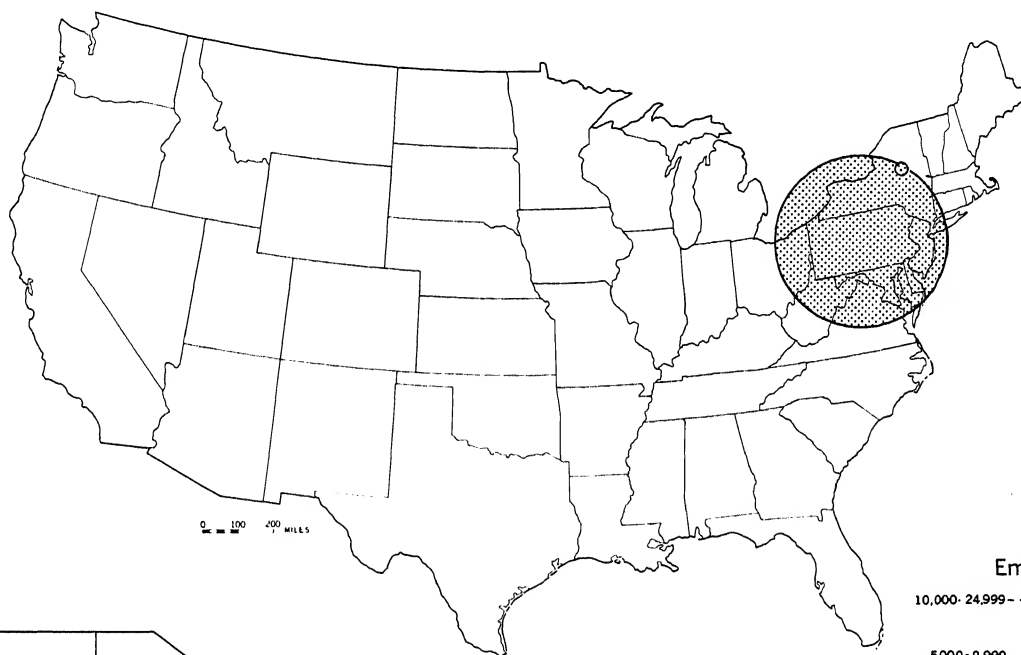
(NA) Not available.

<sup>1</sup>Represents gross shipments less receipts from other establishments for preparation.

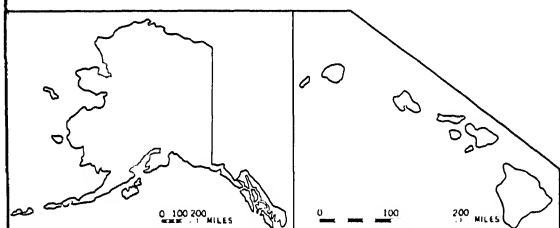
<sup>2</sup>Represents raw coal shipped for use without preparation plus prepared coal.

# ANTHRACITE MINING

Distribution of Employment by State: 1963



No circle is shown for States with fewer than 50 employees.



## Employment and Production: 1840 - 1963

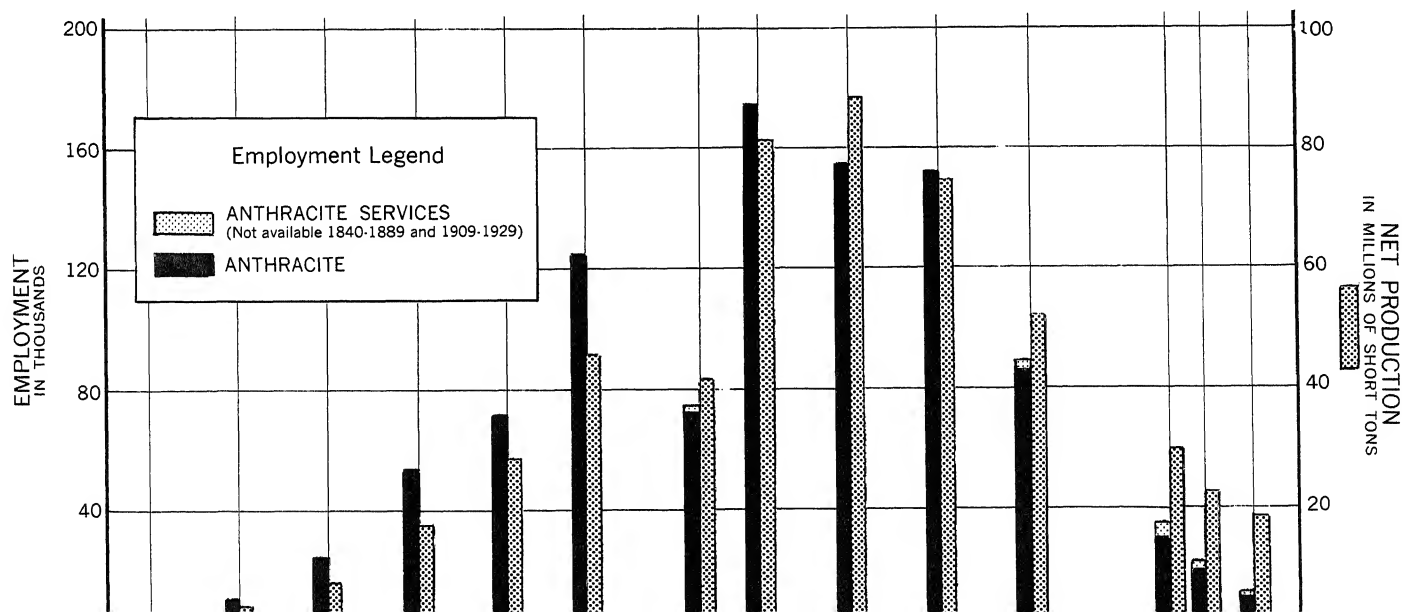


TABLE 1. General Statistics: 1963 and Earlier Years

Ind. code	Industry and year	Operating companies (number)	Establishments		All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	
			Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)		
11	ANTHRACITE MINING:										
	1963.....	1,025	1,069	102	11,786	58,835	10,324	19,544	49,889	120,540	
	1958.....	1,157	1,248	159	22,813	93,396	20,047	30,867	79,425	164,489	
	1954.....	1,296	1,436	245	37,462	135,929	33,026	48,266	113,932	196,835	
	1939.....	359	518	(NA)	88,592	120,050	83,112	124,462	107,798	154,023	
	1935 <sup>2</sup> .....	(NA)	(NA)	(NA)	99,308	134,761	92,438	(NA)	120,102	(NA)	
1111	ANTHRACITE:										
	1963.....	987	1,026	85	10,692	53,022	9,331	17,758	44,867	110,527	
	1958.....	1,075	1,163	117	19,712	79,473	17,266	26,409	67,449	142,198	
	1954.....	1,160	1,291	186	32,769	118,070	28,823	42,061	98,678	167,090	
	1939.....	289	518	(NA)	85,713	115,860	80,429	120,085	104,378	146,418	
	1935 <sup>3</sup> .....	(NA)	350	(NA)	96,053	130,581	89,385	(NA)	116,364	174,665	
	1929.....	(NA)	198	(NA)	151,171	251,249	142,801	(NA)	229,967	320,756	
	1919 <sup>3</sup> .....	(NA)	254	(NA)	154,723	223,284	147,372	(NA)	210,289	289,049	
	1909.....	195	365	(NA)	173,779	96,926	169,471	(NA)	92,343	120,601	
	1902.....	119	4369	(NA)	72,705	41,623	569,691	(NA)	38,716	63,027	
	1889.....	(NA)	411	(NA)	124,203	39,278	122,375	(NA)	37,768	52,567	
	1880.....	(NA)	275	(NA)	70,975	22,751	69,688	(NA)	(NA)	35,541	
	1870.....	(NA)	229	(NA)	53,021	22,983	(NA)	(NA)	(NA)	34,841	
	1860.....	(NA)	176	(NA)	25,126	5,503	(NA)	(NA)	(NA)	10,232	
	1850.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	
	1840.....	(NA)	(NA)	(NA)	2,977	(NA)	(NA)	(NA)	(NA)	(NA)	
1112	ANTHRACITE MINING SERVICES:										
	1963.....	41	43	17	1,094	5,813	993	1,786	5,022	10,013	
	1958.....	84	85	42	3,101	13,923	2,781	4,458	11,976	22,291	
	1954.....	144	145	59	4,693	17,859	4,203	6,205	15,254	29,745	
	1939.....	71	(NA)	(NA)	2,879	4,190	2,683	4,377	3,420	7,605	
	1935 <sup>6</sup> .....	(NA)	(NA)	(NA)	3,255	4,180	3,053	(NA)	3,738	(NA)	
	1902 <sup>7</sup> .....	(NA)	(NA)	(NA)	1,731	(NA)	(NA)	(NA)	(NA)	(NA)	
			Selected expenses								
			Supplies, purchases for resale, and purchased energy (\$1,000)	Coal received for preparation (\$1,000)	Contract or subcontract work (\$1,000)	Purchased machinery installed (\$1,000)	Value of shipments and receipts (\$1,000)	Value of net shipments and receipts (\$1,000)	Net production of anthracite <sup>8</sup> (1,000 short tons)	Capital expenditures (\$1,000)	Horsepower rating of power equipment (1,000)
11	ANTHRACITE MINING:										
	1963.....	35,874	63,919	22,230	9,059	236,511	172,064	18,388	15,111	703	
	1958.....	41,317	85,375	40,505	10,033	325,128	234,000	22,258	16,591	(NA)	
	1954.....	41,746	119,848	51,226	9,270	408,431	291,408	29,255	10,494	1,506	
	1939.....	35,933	(NA)	11,170	(NA)	(NA)	201,126	51,865	(NA)	1,091	
	1935 <sup>2</sup> .....	38,534	(NA)	(NA)	(NA)	(NA)	(NA)	52,159	(NA)	(NA)	
1111	ANTHRACITE:										
	1963.....	31,032	63,919	21,336	6,810	220,973	156,526	18,388	12,651	580	
	1958.....	29,937	85,375	39,319	6,317	290,342	199,214	22,258	12,804	(NA)	
	1954.....	30,659	119,848	50,156	5,667	365,536	248,513	29,255	7,884	1,072	
	1939.....	32,201	(NA)	11,029	(NA)	(NA)	189,648	51,865	(NA)	1,018	
	1935 <sup>3</sup> .....	35,686	(NA)	(NA)	(NA)	(NA)	210,351	52,159	(NA)	(NA)	
	1929.....	57,296	(NA)	6,802	5,580	(NA)	384,854	74,546	(NA)	1,041	
	1919 <sup>3</sup> .....	73,044	433	1,558	(NA)	364,084	363,651	88,171	(NA)	900	
	1909.....	26,724	-	1,703	(NA)	149,028	149,028	80,987	(NA)	678	
	1902.....	12,741	(NA)	406	(NA)	(NA)	76,174	41,374	(NA)	434	
	1889.....	10,822	(NA)	2,333	(NA)	(NA)	65,722	45,545	(NA)	(NA)	
	1880.....	6,742	(NA)	(NA)	(NA)	(NA)	42,283	28,641	(NA)	106	
	1870.....	3,596	(NA)	(NA)	(NA)	(NA)	38,437	17,528	(NA)	49	
	1860.....	1,638	(NA)	(NA)	(NA)	(NA)	11,870	8,115	(NA)	(NA)	
	1850.....	(NA)	(NA)	(NA)	(NA)	(NA)	5,269	4,138	(NA)	(NA)	
	1840.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	963	(NA)	(NA)	
1112	ANTHRACITE MINING SERVICES:										
	1963.....	4,842	(X)	894	2,249	15,538	15,538	( <sup>9</sup> )	2,460	123	
	1958.....	11,380	(X)	1,186	3,716	34,786	34,786	( <sup>9</sup> )	3,787	(NA)	
	1954.....	11,087	(X)	1,070	3,603	42,895	45,895	( <sup>9</sup> )	2,610	434	
	1939.....	3,732	(X)	141	(NA)	11,478	11,478	( <sup>9</sup> )	1,009	73	
	1935 <sup>6</sup> .....	2,848	(X)	(NA)	(NA)	(NA)	(NA)	( <sup>9</sup> )	(NA)	(NA)	
	1902 <sup>7</sup> .....	(NA)	(X)	(NA)	(NA)	(NA)	406	( <sup>9</sup> )	(NA)	(NA)	

Note: See appendix A for explanation of column captions. For more detailed historical statistics for these industries see table 1 of the corresponding chapter of the 1954 Census of Mineral Industries, Vol. 1.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Represents number of mines, culm banks, and dredges.

<sup>2</sup>Represents anthracite (producing operations only) and anthracite stripping services. Data are not available for anthracite services other than stripping.

<sup>3</sup>Represents producing operations only.

<sup>4</sup>Represents number of preparation plants and dredges.

<sup>5</sup>Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.

<sup>6</sup>Represents anthracite stripping services only.

<sup>7</sup>Represents number of employees engaged in all contract work and payments for all contract work as reported by companies operating anthracite mines.

<sup>8</sup>Represents the clean-coal equivalent of all coal mined, including coal produced and used at the same establishment for power or heat.

<sup>9</sup>Coal mined by the Anthracite Mining Services Industry is included in the production shown for the Anthracite Industry.

TABLE 2. General Statistics, by County and Type of Operation: 1963 and 1958

Industry code, industry, county, and type of operation	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Net pro- duction of anthracite <sup>1</sup>  (1,000 short tons)	Capital expendi- tures  (\$1,000)	All employ- ees  (number)	Value added in mining  (\$1,000)
	Total  (number)	With 20 employ- ees or more (number)	Total  (number)	Payroll  (\$1,000)	Total  (number)	Man- hours (1,000)	Wages  (\$1,000)							
11.—ANTHRACITE MINING, United States (Pennsylvania), total	1,069	102	<sup>2</sup> 11,786	<sup>2</sup> 58,835	10,324	19,544	49,889	120,540	131,082	236,511	18,388	15,111	<sup>2</sup> 22,813	164,489
1111.—Anthracite.....	1,026	85	<sup>2</sup> 10,692	<sup>2</sup> 53,022	9,331	17,758	44,867	110,527	123,097	220,973	18,388	12,651	19,712	142,198
1112.—Anthracite mining services...	<sup>3</sup> 43	<sup>3</sup> 17	1,094	5,813	993	1,786	5,022	10,013	7,985	15,538	( <sup>4</sup> )	2,460	<sup>2</sup> 3,101	<sup>3</sup> 22,291
<u>County</u>														
Carbon <sup>5</sup> .....	18	5	273	1,432	252	500	1,337	3,420	1,903	5,238	678	85	460	2,546
Columbia <sup>5</sup> .....	52	2	181	705	158	279	609	1,832	1,161	2,800	372	193	765	5,386
Dauphin.....	50	2	106	345	100	181	335	1,382	2,276	3,539	257	119	140	906
Lackawanna, total.....	66	11	1,030	5,021	950	1,783	4,420	9,259	9,646	18,200	1,114	705	3,433	18,143
Anthracite.....	58	9	897	4,243	829	1,541	3,760	7,736	8,758	15,909	1,114	585	3,232	15,967
Anthracite mining services.....	8	2	133	778	121	242	660	1,523	888	2,291	( <sup>4</sup> )	120	201	2,176
Luzerne, total.....	89	29	4,534	23,678	3,988	7,590	20,074	46,176	35,905	79,778	6,483	2,303	<sup>2</sup> 8,254	51,980
Anthracite.....	71	23	4,082	21,447	3,577	6,900	18,187	42,156	32,584	73,326	6,483	1,414	7,354	45,841
Anthracite mining services.....	18	6	452	2,231	411	690	1,887	4,020	3,321	6,452	( <sup>4</sup> )	889	<sup>2</sup> 900	6,139
Northumberland, total.....	305	10	1,218	5,671	981	2,004	4,363	13,168	17,885	27,322	2,057	3,731	1,980	14,997
Anthracite.....	298	7	1,095	4,985	876	1,782	3,812	11,761	17,024	25,784	2,057	3,001	1,685	13,267
Anthracite mining services.....	7	3	123	686	105	222	551	1,407	861	1,538	( <sup>4</sup> )	730	295	1,730
Schuylkill, total.....	487	42	4,251	20,584	3,802	7,005	18,286	43,228	61,740	97,187	6,751	7,781	7,623	68,352
Anthracite.....	473	37	3,957	18,967	3,527	6,504	16,781	40,871	59,280	92,981	6,751	7,170	6,216	57,914
Anthracite mining services.....	14	5	294	1,617	275	501	1,505	2,357	2,460	4,206	( <sup>4</sup> )	611	1,407	10,438
All other counties <sup>6</sup> .....	12	2	<sup>2</sup> 193	<sup>2</sup> 1,399	93	202	465	2,075	566	2,447	676	194	158	2,179
<u>Type of Operation</u>														
1111.—ANTHRACITE														
Producing establishments, total....	1,021	85	<sup>7</sup> 10,682	<sup>7</sup> 52,983	9,331	17,758	44,867	110,545	<sup>8</sup> 123,097	220,973	18,388	<sup>8</sup> 12,651	19,703	142,348
Mining operations only, total....	869	39	4,093	18,525	3,844	6,847	17,370	42,930	26,417	62,825	10,518	6,522	7,301	60,696
Strip-pit.....	82	15	938	4,716	883	1,621	4,377	12,526	14,257	22,478	3,314	4,305	954	18,320
Underground.....	748	19	2,509	10,553	2,368	4,181	10,108	23,048	7,180	28,587	4,460	1,641	5,505	33,962
Culm bank.....	28	1	101	390	98	171	383	1,692	842	2,249	1,291	285	84	4,836
Combination:														
Strip-pit and underground.....	3	1	84	316	73	106	264	552	143	663	79	32	758	3,578
Other combinations <sup>9</sup> .....	8	3	461	2,550	422	768	2,238	5,112	3,995	8,848	1,374	259		
Mining operations with prepara- tion plants, total.....	73	29	4,901	25,893	4,428	8,916	22,508	53,137	43,691	94,957	7,870	1,871	10,019	63,758
Strip-pit.....	14	8	738	4,226	678	1,445	3,826	9,574	16,872	25,887	1,620	559	752	4,786
Underground.....	10	4	672	2,942	502	966	2,159	3,674	3,130	6,673	419	131	573	3,196
Culm bank.....	20	5	359	1,793	319	607	1,557	5,092	3,290	8,189	1,198	193	503	4,129
Dredge.....	15	2	103	527	96	211	490	1,965	623	2,354	695	234	175	1,950
Combination:														
Strip-pit and underground.....	5	4	821	4,309	773	1,578	3,943	8,530	5,321	13,544	1,013	307	8,016	49,697
Other combinations <sup>9</sup> .....	9	6	2,208	12,096	2,060	4,109	10,533	24,302	14,455	38,310	2,925	447		
Preparation plants only, total....	79	17	1,190	5,639	1,059	1,995	4,989	14,478	<sup>8</sup> 52,989	63,191	-	<sup>8</sup> 4,258	2,383	17,894
Mechanical cleaning <sup>11</sup> .....	73	16	1,153	5,520	1,026	1,936	4,878	14,136	<sup>8</sup> 52,248	62,141	-	<sup>8</sup> 4,225	2,316	17,305
Mechanical crushing, screening, and sizing only.....	6	1	37	119	33	59	111	342	741	1,050	-	33	67	589
Nonproducing establishments.....	5	-	10	39	-	-	-	( <sup>12</sup> )	( <sup>8</sup> )	-	-	( <sup>8</sup> )	9	( <sup>12</sup> )

Note: See appendix A for an explanation of column captions.

<sup>1</sup>Represents the clean-coal equivalent of all coal mined, based on the location of the mine.

<sup>2</sup>Includes data for central offices and related facilities in New York State.

<sup>3</sup>Service companies were permitted to prepare one report for all mining services performed. The totals shown for number of establishments in this table, and all figures shown for number of establishments in other tables of this report, are the counts of these reports. However, these reports contained data for the total receipts for services, total employment, and tonnage of raw coal mined by county. All other county information for these industries in this table was obtained by allocating the totals reported for each establishment on the basis of the reported county data. The number of establishments shown by county represents the number of operations in separate counties.

<sup>4</sup>Coal mined by the Anthracite Mining Services Industry is included in the production shown for the Anthracite Industry.

<sup>5</sup>Represents establishments in the Anthracite Mining Industry and the Anthracite Mining Services Industry.

<sup>6</sup>Represents Berks, Lancaster, Lebanon, Northampton (1958 only), Snyder, Sullivan, Susquehanna (1958 only), and Wayne Counties.

<sup>7</sup>Includes data for separately reported central offices and related facilities. These are not distributed by detailed types of operation.

<sup>8</sup>Figures for nonproducing establishments are included with those for producing mechanical cleaning plants.

<sup>9</sup>For 1963, represents 8 strip-pit and culm bank operations; for 1958, represents 3 combination strip-pit and underground operations; 3 strip-pit and culm bank operations; 2 underground and culm bank operations; and 2 strip-pit, underground, and culm bank operations.

<sup>10</sup>For 1963, represents 6 strip-pit and culm bank operations; 1 underground and culm bank operation; and 2 strip-pit, underground, and culm bank operations; for 1958, represents 10 combination strip-pit and underground operations; 2 strip-pit and culm bank operations; 2 underground and culm bank operations; and 2 strip-pit, underground, and culm bank operations.

<sup>11</sup>Represents cleaning by wet washing or pneumatic methods (breakers and washeries).

<sup>12</sup>Not shown since the cost of supplies, purchased fuels and electric energy, contract work, and purchased machinery installed exceeds capital expenditures.

TABLE 3: Detailed Statistics for Selected Types of Operation: 1963

Item	11.-- Anthracite mining industries, total	1111.--Anthracite industry											1112.-- Anthracite mining services industry	
		All types of opera- tions	Producing mining operations only				Producing mining operations with preparation plants				Producing prepara- tion plants only			
			All opera- tions	Strip- pit	Under- ground	Com- bination	All opera- tions	Strip- pit	Under- ground	Culm bank	Com- bination	All plants		Mechan- ical cleaning
Number of establishments, total.....	1,069	1,026	869	82	748	11	73	14	10	20	14	79	73	43
With 0-19 employees.....	967	941	830	67	729	7	44	6	6	15	4	62	57	26
With 20-99 employees.....	89	73	36	15	18	2	21	7	2	4	6	16	15	16
With 100 employees and over.....	13	12	3	-	1	2	8	1	2	1	4	1	1	1
Including mines, culm banks, and dredges.....	946	946	869	-	-	-	73	14	10	20	14	-	-	-
Including preparation plants.....	153	153	-	-	-	-	73	14	10	20	14	79	73	-
Net production of anthracite, total.....1,000 short tons..	18,388	18,388	10,518	3,314	4,460	1,453	7,870	1,620	419	1,198	3,938	-	-	(1)
Fresh-mined coal from—														
Underground operations.....do....	6,918	6,918	4,498	-	4,460	38	2,420	-	419	-	2,001	-	-	-
Strip-pit operations, total.....do....	7,691	7,691	4,482	3,314	-	1,168	3,209	1,620	-	-	1,589	-	-	(1)
Mined by same company.....do....	5,310	5,310	3,684	2,747	-	937	1,626	696	-	-	930	-	-	-
Mined by outside contractor.....do....	2,381	2,381	798	567	-	231	1,583	924	-	-	659	-	-	(1)
Reclaimed coal from—														
Culm bank operations, total.....do....	3,084	3,084	1,538	-	-	247	1,546	-	-	1,198	348	-	-	(1)
Mined by same company.....do....	2,285	2,285	1,486	-	-	195	799	-	-	716	83	-	-	-
Mined by outside contractor.....do....	799	799	52	-	-	52	747	-	-	482	265	-	-	(1)
Dredge operations.....do....	695	695	-	-	-	-	695	-	-	-	-	-	-	-
Net shipments of anthracite, total.....do....	18,353	18,353	981	37	144	26	10,146	2,699	709	1,232	4,810	7,226	7,093	(1)
Raw coal sold for use without preparation.....do....	981	981	981	37	144	26	-	-	-	-	-	-	-	(1)
Prepared coal.....do....	17,372	17,372	-	-	-	-	10,146	2,699	709	1,232	4,810	7,226	7,093	(1)
Value of shipments and receipts, total...\$1,000..	236,511	220,973	62,825	22,478	28,587	9,511	94,957	25,887	6,673	8,189	51,814	63,191	62,141	15,538
Raw coal transferred to other establishments for preparation and coal resales.....do....	64,447	64,447	60,805	21,981	27,972	9,393	3,294	579	10	(D)	(D)	348	348	-
Net shipments and receipts, total.....do....	172,064	156,526	2,020	497	615	118	91,663	25,308	6,663	(D)	(D)	62,843	61,793	15,538
Coal net shipments.....do....	155,899	155,899	1,684	162	614	118	91,380	25,308	6,663	8,139	48,916	62,835	61,785	15,538
Other products and services.....do....	16,165	627	336	335	1	-	283	-	-	(D)	(D)	8	8	15,538
Value added in mining.....do....	120,540	110,527	42,930	12,526	23,048	5,664	53,137	9,474	3,674	5,092	32,832	14,478	14,136	10,013
Persons in industry, total.....number..	13,159	12,047	5,352	996	3,676	547	4,934	746	676	366	3,034	1,250	1,208	1,112
Production, development, and exploration workers, average for year.....do....	10,321	9,327	3,844	883	2,368	495	4,428	678	502	319	2,833	1,059	1,026	993
January.....do....	10,679	9,691	3,965	891	2,456	430	4,595	788	557	289	2,863	1,099	1,061	988
February.....do....	10,618	9,633	3,996	887	2,491	532	4,518	766	561	283	2,809	1,083	1,049	985
March.....do....	10,374	9,391	3,842	898	2,338	523	4,485	662	591	327	2,808	1,058	1,025	983
April.....do....	10,103	9,175	3,832	827	2,461	448	4,195	653	443	268	2,726	1,059	1,026	980
May.....do....	9,983	9,025	3,695	831	2,306	460	4,279	662	447	313	2,752	1,045	1,013	958
June.....do....	9,917	8,949	3,681	834	2,327	426	4,156	660	442	246	2,708	1,073	1,040	968
July.....do....	9,802	8,834	3,649	830	2,323	401	4,079	657	445	256	2,624	1,067	1,033	968
August.....do....	10,294	9,297	3,847	866	2,412	468	4,388	681	465	308	2,837	1,056	1,023	997
September.....do....	10,348	9,321	3,827	893	2,345	484	4,393	683	476	273	2,864	1,061	1,027	1,007
October.....do....	10,424	9,390	3,883	919	2,359	493	4,408	675	488	277	2,877	1,059	1,024	1,034
November.....do....	10,645	9,611	3,985	940	2,410	524	4,550	701	503	328	2,929	1,070	1,036	1,034
December.....do....	10,682	9,664	4,022	955	2,410	545	4,505	689	523	272	2,930	1,097	1,062	1,018
Other employees.....do....	2,146	2,136	249	55	141	50	473	60	170	40	196	131	127	101
Proprietors and firm members.....do....	1,373	1,355	1,259	58	1,167	2	33	8	4	7	5	60	55	18
Performing manual labor.....do....	1,307	1,291	1,211	57	1,123	2	27	6	4	5	4	50	46	16
Man-hours worked by production, development, and exploration workers, total.....1,000..	19,544	17,758	6,847	1,621	4,181	874	8,916	1,445	966	607	5,687	1,996	1,936	1,786
At mines, total.....do....	15,077	13,291	6,847	1,621	4,181	874	6,444	749	866	283	4,468	-	-	1,786
Underground.....do....	7,458	7,403	3,893	-	3,830	63	3,510	-	673	-	2,837	-	-	355
Strip-pit, culm bank, and dredge.....do....	5,684	3,973	2,437	1,541	-	726	1,536	609	-	248	602	-	-	31,711
Surface (including mine shops and yards).....do....	1,935	1,915	517	80	351	85	1,398	140	193	35	1,029	-	-	320
At preparation plants.....do....	4,467	4,467	-	-	-	-	2,472	696	100	324	1,219	1,996	1,936	-
Man-hours spent on development and exploration work (included above).....do....	1,064	1,064	219	55	153	11	841	260	14	73	494	4	4	-
Principal expenses designated below, total.....\$1,000..	180,858	169,309	39,695	14,958	16,964	6,824	68,616	20,671	5,982	4,992	35,962	55,408	54,573	11,549
Wages of production, development, and exploration workers.....do....	49,889	44,867	17,370	4,377	10,108	2,502	22,508	3,826	2,159	1,557	14,476	4,989	4,878	5,032
Salaries of all other employees.....do....	28,946	28,155	1,155	339	445	364	3,385	400	783	236	1,929	650	642	79
See footnotes at end of table.														

TABLE 3. Detailed Statistics for Selected Types of Operation: 1963—Continued

Item	11.-- Anthracite mining industries, total	1111.--Anthracite industry												1112.-- Anthracite mining services industry
		All types of opera- tions	Producing mining operations only				Producing mining operations with preparation plants					Producing prepara- tion plants only		
			All opera- tions	Strip- pit	Under- ground	Com- bination	All opera- tions	Strip- pit	Under- ground	Culm bank	Com- bination	All plants	Mechan- ical cleaning	
Principal expenses designated below--Continued														
Supplies.....\$1,000..	26,753	23,071	11,417	5,110	4,301	1,720	9,197	2,396	613	1,599	4,430	42,457	42,454	3,682
Raw anthracite received for preparation..do....	63,919	63,919	-	-	-	-	18,234	8,067	2,113	170	7,884	45,685	45,004	-
Anthracite received for resale without further processing.....do....	403	403	7	1	6	-	72	16	5	7	44	324	324	-
Purchased fuels consumed.....do....	2,947	2,117	1,087	403	357	254	797	205	28	156	301	233	229	830
Purchased electricity.....do....	5,771	5,441	1,728	540	818	362	2,798	628	217	492	1,260	915	892	330
Contract work.....do....	22,230	21,336	6,931	4,188	929	1,622	11,625	5,133	64	775	5,638	42,780	42,775	894
Purchased machinery installed.....do....	9,059	6,810	5,247	4,015	769	180	968	427	90	91	219	4595	4570	2,249
Capital expenditures, total.....do....	15,111	12,651	6,522	4,305	1,641	291	1,871	559	131	193	754	44,258	44,225	2,460
Development and exploration of mineral property.....do....	939	939	559	246	277	25	369	6	32	1	329	411	49	-
Preparation plant and other construction.....do....	4,177	4,159	128	66	40	12	578	221	7	46	302	43,453	43,453	18
New machinery and equipment.....do....	8,065	6,270	4,663	3,041	1,232	182	913	330	92	144	117	694	664	1,795
Used plant and equipment.....do....	1,930	1,283	1,172	952	92	72	11	2	-	2	6	100	99	647
Energy used.....million kw. hrs. equivalent..	2,692	2,442	546	170	251	103	1,567	179	21	84	1,222	329	327	250
Anthracite produced and used at the same establishment.....1,000 short tons..	158	158	10	(5)	1	9	143	-	-	2	141	5	5	-
Fuel purchased:														
Coal.....do....	26	26	(5)	(5)	-	-	-	-	-	-	-	26	26	(5)
Distillate fuel oil.....1,000 barrels..	306	207	92	44	7	31	105	28	1	20	43	10	10	99
Residual fuel oil.....do....	40	33	29	15	4	10	1	-	(5)	-	(5)	3	3	7
Gas.....million cubic feet..	2	-	-	-	-	-	-	-	-	-	-	-	-	2
Gasoline.....1,000 gallons..	5,534	4,863	3,642	452	2,951	194	725	213	32	122	358	496	481	671
Other fuels and undistributed <sup>6</sup> .....\$1,000..	448	321	218	32	173	4	103	26	11	25	9	-	-	127
Electric energy purchased....million kw. hrs..	376	359	112	43	48	21	194	48	15	25	89	53	52	17
Electric energy generated and used.....do....	58	58	(D)	-	(D)	-	(D)	-	-	-	(D)	-	-	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	704	581	228	92	98	30	247	46	22	23	149	100	97	123
Per production worker.....hp..	68	62	59	104	42	61	56	69	44	72	53	94	95	124
Prime movers.....1,000 hp..	362	257	118	65	31	16	108	9	4	10	82	31	30	105
Electric motors driven by purchased energy.....do....	342	324	110	27	67	14	139	37	18	13	67	69	67	18
Horsepower rating of electric motors driven by energy generated at the establishment..do....	42	41	2	(5)	2	-	39	(5)	-	2	37	(5)	(5)	1

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Coal mined by the Anthracite Mining Services Industry is included in the production shown for the Anthracite Industry.<sup>2</sup>Includes figures for separately reported central offices and related facilities. These were not distributed by detailed types of operation.<sup>3</sup>Service establishments were requested to report man-hours by kind of work performed, rather than by department. The man-hours so reported have been allocated to the mine department where the service was performed. Thus "underground" man-hours represent such services as drilling, rock work, shaft sinking, and mine tunneling; "strip-pit, culm bank, and dredge" man-hours represents stripping overburden, strip-pit mining, and loading culm bank material; and "Surface" man-hours represent excavating, shop work, hauling from mine to breaker, and other miscellaneous services.<sup>4</sup>Figures for nonproducing establishments are included with those for producing mechanical cleaning plants.<sup>5</sup>Less than one-half of the unit of measure specified.<sup>6</sup>Undistributed fuels costs for all Anthracite Mining Industries amounted to \$292 thousand; for the Anthracite Industry, \$197 thousand; and for the Anthracite Mining Services Industry, \$95 thousand.



TABLE 4. Selected Statistics, by Employment Size of Establishments: 1963

Item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
11.—ANTHRACITE MINING											
Establishments.....number..	1,069	732	127	108	62	27	7	5	-	1	-
All employees:											
Total.....do....	<sup>1</sup> 11,786	543	839	1,430	1,907	1,874	1,082	<u>3,613</u>	-	(D)	-
Payroll.....\$1,000..	<sup>1</sup> 58,835	1,688	3,062	6,508	9,537	9,956	5,562	<u>19,596</u>	-	(D)	-
Production, development, and exploration workers:											
Total.....number..	10,324	534	736	1,296	1,745	1,714	994	<u>3,305</u>	-	(D)	-
Man-hours.....1,000..	19,544	888	1,306	2,445	3,239	3,140	1,798	<u>6,728</u>	-	(D)	-
Wages.....\$1,000..	49,889	1,670	2,761	5,912	8,539	8,858	5,015	<u>17,134</u>	-	(D)	-
Value added in mining.....do....	120,540	10,527	7,551	13,726	20,591	21,452	10,953	<u>35,740</u>	-	(D)	-
Value of shipments and receipts.....do....	236,511	18,285	13,924	27,444	46,795	53,879	26,059	<u>50,125</u>	-	(D)	-
Capital expenditures.....do....	15,111	3,604	1,371	4,189	2,966	1,794	364	<u>823</u>	-	(D)	-
111.—Anthracite											
Establishments.....number..	1,026	723	119	99	53	20	6	5	-	1	-
All employees:											
Total.....do....	<sup>1</sup> 10,692	524	782	1,308	1,607	<u>2,360</u>	(D)	<u>3,613</u>	-	(D)	-
Payroll.....\$1,000..	<sup>1</sup> 53,022	1,610	2,822	5,804	7,773	<u>12,491</u>	(D)	<u>19,596</u>	-	(D)	-
Production, development, and exploration workers:											
Total.....number..	9,331	516	683	1,180	1,475	<u>2,172</u>	(D)	<u>3,305</u>	-	(D)	-
Man-hours.....1,000..	17,758	850	1,218	2,222	2,680	<u>4,060</u>	(D)	<u>6,728</u>	-	(D)	-
Wages.....\$1,000..	44,867	1,595	2,534	5,244	7,068	<u>11,292</u>	(D)	<u>17,134</u>	-	(D)	-
Value added in mining.....do....	110,527	10,391	6,814	11,922	17,797	<u>27,863</u>	(D)	<u>35,740</u>	-	(D)	-
Value of shipments and receipts.....do....	220,973	18,006	13,012	25,129	42,049	<u>72,652</u>	(D)	<u>50,125</u>	-	(D)	-
Capital expenditures.....do....	12,651	3,444	1,211	3,669	2,471	<u>1,033</u>	(D)	<u>823</u>	-	(D)	-
Producing establishments, by type of operation, total.....number..	1,021	720	117	99	53	20	6	5	-	1	-
Mining operations only:											
Strip-pit.....do....	82	42	10	15	11	4	-	-	-	-	-
Underground.....do....	748	608	75	48	15	3	-	1	-	-	-
Culm bank.....do....	28	18	8	1	1	-	-	-	-	-	-
Combination:											
Strip-pit and underground.....do....	3	-	-	2	-	1	-	-	-	-	-
Other combinations.....do....	8	2	3	-	-	1	2	-	-	-	-
Mining operations with preparation plants:											
Strip-pit.....do....	14	2	2	2	5	2	-	1	-	-	-
Underground.....do....	10	2	2	2	1	1	1	1	-	-	-
Culm bank.....do....	20	5	2	8	4	-	1	-	-	-	-
Dredges.....do....	15	11	2	-	1	1	-	-	-	-	-
Combination:											
Strip-pit and underground.....do....	5	-	1	-	> 1	1	-	2	-	-	-
Other combinations.....do....	9	-	1	2	1	3	1	-	-	1	-
Preparation plants only:											
Mechanical cleaning.....do....	73	27	11	19	12	3	1	-	-	-	-
Mechanical crushing, screening, and sizing only.....do....	6	3	2	-	1	-	-	-	-	-	-
1112.—Anthracite Mining Services											
Establishments.....number..	43	9	8	9	9	7	1	-	-	-	-
All employees:											
Total.....do....	1,094	19	57	122	300	<u>596</u>	(D)	-	-	-	-
Payroll.....\$1,000..	5,813	78	240	704	1,764	<u>3,027</u>	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	993	18	53	116	270	<u>536</u>	(D)	-	-	-	-
Man-hours.....1,000..	1,786	38	88	223	559	<u>878</u>	(D)	-	-	-	-
Wages.....\$1,000..	5,022	75	227	668	1,471	<u>2,581</u>	(D)	-	-	-	-
Value added in mining.....do....	10,013	136	737	1,804	2,794	<u>4,542</u>	(D)	-	-	-	-
Value of shipments and receipts.....do....	15,538	279	912	2,315	4,746	<u>7,286</u>	(D)	-	-	-	-
Capital expenditures.....do....	2,460	160	160	520	495	<u>1,125</u>	(D)	-	-	-	-

Note: See appendix A for an explanation of terms used.

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.

<sup>1</sup>Includes figures for separately reported central offices and related facilities. These were not distributed by size of establishment.

**TABLE 5. Industry-Product Analysis--Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1963 and 1958**

(In thousands of dollars)

Ind. code	Industry and year	Value of shipments and receipts of establishments classified in the industry					Value of net shipments of primary products of the industry shipped by establishments in all industries or receipts for primary services by all industries		
		Total	Primary products or services	Secondary products	Miscellaneous receipts for services	Products purchased and resold without further processing	Total (produced or received in all industries)	Produced or received in the industry	Produced or received in other industries
1111	Anthracite.....1963..	220,973	219,914	(D)	(D)	1432	155,899	155,899	-
	.....1958..	290,342	282,593	(D)	(D)	14,960	196,425	196,425	-
1112	Anthracite mining services.....1963..	15,538	15,538	-	-	-	15,625	15,538	87
	.....1958..	34,786	34,231	-	555	-	234,231	34,231	(NA)

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>Represents anthracite purchased and resold without further processing: 94 thousand short tons in 1963 and 732 thousand in 1958.<sup>2</sup>Represents services performed in the Anthracite Mining Services Industry only.

**TABLE 6A. Primary Products Produced and Services Performed in All Industries, by County: 1963 and 1958**

(For net production of anthracite by county and type of operation, see table 2)

County	Net anthracite shipments <sup>1</sup>				Raw anthracite shipped (including interplant transfers) in 1963			
	1963		1958		For use without preparation		For preparation at other establishments	
	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
United States (Pennsylvania), total.....	18,353	155,899	22,341	196,425	981	1,684	16,611	64,015
Carbon.....	75	327	446	4,275	(2)	(2)	1,133	4,199
Columbia.....	176	881	89		(2)	(2)	360	1,580
Dauphin.....	483	3,089	265	1,805	149	487	101	450
Lackawanna.....	1,075	11,187	2,332	24,257	65	214	991	4,421
Luzerne.....	6,681	59,839	7,011	70,396	517	552	2,826	13,155
Northumberland.....	2,165	17,111	2,556	18,410	174	137	1,979	8,395
Schuylkill.....	7,040	61,223	8,962	75,072	41	179	9,179	31,610
Other counties <sup>4</sup> .....	658	2,242	680	2,210	235	2115	42	205
	Raw anthracite for preparation in 1963				Prepared anthracite shipped (including interplant transfers) in 1963			
	Received from other establishments		Mined and prepared at the same establishment (1,000 short tons)		Mechanically cleaned (breaker, washery, and dredge product)		Mechanically crushed, screened, or sized only	
	Quantity (1,000 short tons)	Cost (\$1,000)			Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
United States (Pennsylvania), total.....	16,326	63,919	13,272		17,215	152,973	157	1,242
Carbon.....	(2)	(2)	492	{	(2)	(2)	-	-
Columbia.....	-	-			(2)	(2)	-	-
Dauphin.....	355	1,717	71	334	32,602	(3)	(3)	(3)
Lackawanna.....	822	4,011	798		31,010	310,973	(3)	(3)
Luzerne.....	3,499	14,832	7,072	6,164	59,287	-	-	-
Northumberland.....	1,960	9,476	907	31,991	316,974	(3)	(3)	(3)
Schuylkill.....	9,674	33,821	2,967	36,999	61,044	(3)	(3)	(3)
Other counties <sup>4</sup> .....	216	262	965	2874	23,335	-	-	-
Type of service	1963			1958				
	Raw anthracite mined and culm bank material loaded (1,000 short tons)	Receipts for services (\$1,000)		Raw anthracite mined and culm bank material loaded (1,000 short tons)	Receipts for services (\$1,000)			
Anthracite mining services, total.....	5,419	15,625		11,432	34,231			
Stripping overburden and strip mining anthracite not for own account.....	3,913	13,793		8,682	30,968			
Recovering culm bank coal not for own account....	1,506	1,641		2,750	2,337			
All other services.....	(X)	191		(X)	926			

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>Represents raw coal for use without preparation plus prepared coal.<sup>2</sup>Figures for Carbon and Columbia are included with those for other counties.<sup>3</sup>Figures for mechanically crushed, screened, or sized only are included with those for mechanically cleaned.<sup>4</sup>Represents Berks, Lancaster, Lebanon, Northampton (1958 only), Snyder, Sullivan, Susquehanna (1958 only), and Wayne counties.

TABLE 6B. Product Classes—Indexes of Production and Unit Value for Primary Products Shipped by All Producers: 1963 and 1958

Product code	Product and year	Indexes (1954 = 100)	
		Production	Unit value
11	Anthracite mining.....1963..	57	103
	.....1958..	75	106
1111	Anthracite (net shipments).....1963..	62	103
	.....1958..	75	106
11111	Raw anthracite (gross shipments).....1963..	71	79
	.....1958..	83	92
11112	Prepared anthracite.....1963..	61	103
	.....1958..	74	106
1112	Anthracite mining services.....1963..	34	108
	.....1958..	75	106

TABLE 6C. Shipments of Primary Products Distributed by Value Per Ton: 1963

Product and item	Total	Shipments by average value per short ton f.o.b. mine or plant of <sup>1</sup> --									
		Less than \$2.95	\$2.95 to \$3.79	\$3.80 to \$4.84	\$4.85 to \$5.44	\$5.45 to \$6.14	\$6.15 to \$7.84	\$7.85 to \$8.84	\$8.85 to \$9.99	\$10.00 to \$11.09	\$11.10 and over
Raw anthracite for use without preparation:											
Quantity shipped.....1,000 short tons..	981	769	32	165	<u>15</u>	(D)	(D)	-	-	-	-
Percent of total.....	100.0	78.3	3.3	16.8	<u>1.6</u>	(D)	(D)	-	-	-	-
Value of shipments.....\$1,000..	1,684	769	115	710	<u>90</u>	(D)	(D)	-	-	-	-
Percent of total.....	100.0	45.7	6.8	42.2	<u>5.3</u>	(D)	(D)	-	-	-	-
Raw anthracite for preparation at other establishments:											
Quantity shipped.....1,000 short tons..	16,731	2,720	3,867	6,200	2,578	670	<u>576</u>	(D)	-	-	-
Percent of total.....	100.0	16.3	23.1	37.3	15.4	4.0	<u>3.4</u>	(D)	-	-	-
Value of shipments.....\$1,000..	64,315	4,226	12,992	26,112	13,027	3,945	<u>3,713</u>	(D)	-	-	-
Percent of total.....	100.0	6.6	20.2	40.8	20.3	6.1	<u>5.7</u>	(D)	-	-	-
Prepared anthracite mechanically cleaned (breaker, washery, and dredge product):											
Quantity shipped.....1,000 short tons..	17,215	10	817	455	211	833	779	3,856	5,211	4,346	697
Percent of total.....	100.0	0.1	4.8	2.7	1.2	4.8	4.5	22.4	30.3	25.2	4.1
Value of shipments.....\$1,000..	152,973	28	2,648	2,147	1,076	4,924	5,357	32,822	49,880	45,379	8,712
Percent of total.....	100.0	( <sup>2</sup> )	2.0	1.4	0.1	3.2	3.5	21.6	32.6	29.8	5.8
Prepared anthracite mechanically crushed, screened, or sized only:											
Quantity shipped.....1,000 short tons..	157	-	-	-	<u>89</u>	-	(D)	-	<u>68</u>	(D)	(D)
Percent of total.....	100.0	-	-	-	<u>56.7</u>	-	(D)	-	<u>43.3</u>	(D)	(D)
Value of shipments.....\$1,000..	1,242	-	-	-	<u>603</u>	-	(D)	-	<u>639</u>	(D)	(D)
Percent of total.....	100.0	-	-	-	<u>48.6</u>	-	(D)	-	<u>51.4</u>	(D)	(D)

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures to the left.

<sup>1</sup>The "average values" are based on the entire shipments of the specified product by each establishment. Thus they are representative of varied average prices among establishments but not of variations within an establishment.

<sup>2</sup>Less than 0.05 percent.

TABLE 7A. Supplies Used in the Industries, 1963 and 1958; by Type of Operation, 1963

(For the quantity and cost of coal received for preparation see table 6A. For the quantity and cost of purchased fuels and electric energy used, and the total quantity of coal produced and used for fuel, see table 3)

Year and type of operation	Total cost of supplies used (\$1,000)	Explosives <sup>1</sup>		Steelmill shapes and forms <sup>2</sup>		Cost of rough or hewn woods products and stumpage <sup>3</sup> (\$1,000)	Cost of other supplies (\$1,000)	Cost of supplies undistributed by type (\$1,000)
		Quantity (1,000 pounds)	Cost (\$1,000)	Quantity (short tons)	Cost (\$1,000)			
		INDUSTRY 1111.—ANTHRACITE						
1963.....	23,091	36,100	2,334	6,285	1,006	410	15,578	3,763
1958.....	16,403	11,880	2,095	11,171	1,902	1,138	7,785	3,483
By type of operation: 1963								
Producing establishments:								
Mining operations only:								
Strip-pit.....	5,110	2,699	155	18	7	7	4,615	326
Underground.....	4,301	1,463	310	661	121	131	1,487	2,252
Culm bank.....	286	-	-	-	-	-	236	50
Combination.....	1,720	1,585	425	68	15	-	1,258	22
Mining operations with preparation plants:								
Strip-pit.....	2,396	9,681	3 ?	433	70	4	1,773	212
Underground.....	613	353	182	2,028	258	90	151	723
Culm bank.....	1,599	2,628		233	48	1	779	
Dredge.....	159	-	-	-	-	-	74	85
Combination:								
Strip-pit and underground.....	2,094	9,177	379	65	15	62	1,637	1
Other combinations.....	2,336	8,514	546	2,233	343	106	1,341	-
Preparation plants only.....	2,457	-	-	546	129	9	2,227	92
Nonproducing establishments.....		-	-	-	-	-		-
INDUSTRY 1112.—ANTHRACITE MINING SERVICES								
1963.....	3,682	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	3,682
1958.....	9,153	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	9,153

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Excludes blasting accessories and breaking agents.<sup>2</sup>Represents such items as rails, wheels, track accessories, roof bolts, plates, pipe, tubing, piling, drill steel bars, other bars, sheets, strip, wire, wire products, and structural shapes.<sup>3</sup>Represents such items as logs, bolts, hewn cross ties, and hewn or round mine timbers and ties.

TABLE 7B. Horsepower of Power Equipment Used, by Type of Operation: 1963 and 1954

Ind. code	Industry and type of operation	Aggregate horsepower per production, development, and exploration worker		1963				
		1963	1954	Aggregate horsepower (prime movers and electric motors driven by purchased energy)				
				Total (1,000)	Loading equipment (1,000)	Transportation equipment		All other equipment (1,000)
						Highway-type (1,000)	Other (1,000)	
11	Anthracite mining industries, total.....	68	46	704	143	136	99	325
1111	ANTHRACITE INDUSTRY.....	62	37	581	110	96	71	303
	Type of operation							
	Producing establishments, total.....	62	35	575	110	96	71	298
	Mining operations only:							
	Strip-pit.....	104	82	92	43	33	7	9
	Underground.....	42	25	98	33	15	21	29
	Culm bank.....	82	99	8	3	3	(1)	2
	Combination.....	61	227	30	9	6	8	7
	Mining operations with preparation plants:							
	Strip-pit.....	68	84	46	3	3	3	37
	Underground.....	44	41	22	-	2	5	15
	Culm bank.....	72	52	23	3	4	3	13
	Dredge.....	73	49	7	3	-	1	3
	Combination.....	53	245	149	8	9	16	116
	Preparation plants only:							
	Mechanical cleaning.....	95	361	97	5	20	7	65
	Mechanical crushing, screening, and sizing only.....	91	(NA)	3	-	1	(1)	2
	Nonproducing establishments.....	(4)	1,549	6	-	(1)	-	6
1112	ANTHRACITE MINING SERVICES.....	124	103	123	33	40	28	22

See footnotes at end of table.

**Operation: 1963 and 1954—Continued**

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
<sup>1</sup>Less than 500 horsepower.  
<sup>2</sup>Represents combined underground mines and strip-pits only.  
<sup>3</sup>Represents breakers only.  
<sup>4</sup>No production, development, or exploration workers were reported at nonproducing establishments in 1963.

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with average of--					
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1111.—ANTHRACITE							
Number of establishments.....	1,026	994	20	6	5	-	1
Number reporting water use, total.....	242	210	20	6	5	-	1
By source of water:							
Utility.....	56	40	11	2	3	-	-
Other than utility.....	130	120	8	1	-	-	1
Source not specified.....	56	50	1	3	2	-	-
By quantity of water intake:							
Under 1 million gallons.....	172	159	9	2	2	-	-
1-9 million gallons.....	16	11	2	3	-	-	-
10-19 million gallons.....	10	8	-	-	2	-	-
20-99 million gallons.....	13	13	-	-	-	-	-
100 million gallons and over.....	31	19	9	1	1	-	1
Number of employees.....	10,692	4,221	2,360	(D)	3,613	-	(D)
Number at establishments reporting water use.....	19,318	2,907	2,360	(D)	3,613	-	(D)
Value added in mining.....\$1,000..	110,527	46,924	27,863	(D)	35,740	-	(D)
Value added at establishments reporting water use.....do....	95,225	31,622	27,863	(D)	35,740	-	(D)
INDUSTRY 1112.—ANTHRACITE MINING SERVICES							
Number of establishments.....	43	35	7	1	-	-	-
Number reporting water use, total.....	39	31	7	1	-	-	-
By source of water:							
Utility.....	10	7	3	-	-	-	-
Other than utility.....	21	16	4	1	-	-	-
Source not specified.....	8	8	-	-	-	-	-
By quantity of water intake:							
Under 1 million gallons.....	35	27	7	1	-	-	-
1-9 million gallons.....	2	2	-	-	-	-	-
100 million gallons and over.....	2	2	-	-	-	-	-
Number of employees.....	1,094	498	596	(D)	-	-	-
Number at establishments reporting water use.....	1,067	471	596	(D)	-	-	-
Value added in mining.....\$1,000..	10,013	5,471	4,542	(D)	-	-	-
Value added at establishments reporting water use.....do....	9,922	5,380	4,542	(D)	-	-	-

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.

Includes figures for number of employees at separately reported central offices and related facilities. These were not distributed by size of establishment.

TABLE 8. General Statistics for Establishments Classified by Output Per Man-Hour, by Selected Types of Operation: 1963

Type of operation and tons per man-hour <sup>1</sup>	Establish- ments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expendi- tures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
INDUSTRY 1111.—ANTHRACITE									
All establishments.....	1,026	210,692	253,022	9,331	17,758	44,867	110,527	220,973	12,651
Producing establishments, total.....	1,021	210,184	250,057	9,331	17,758	44,867	110,545	220,973	(D)
Mining operations only:									
Strip-pit, total.....	82	938	4,716	883	1,621	4,377	12,526	22,478	4,305
Less than 1.00.....	6	70	265	67	112	252	(3)	254	(D)
1.00 to 1.99.....	6	74	344	66	129	317	677	767	359
2.00 to 2.99.....	10	167	1,031	146	316	820	2,500	3,405	700
3.00 and over.....	7	222	1,243	220	345	1,241	4,764	7,865	969
Undistributed <sup>4</sup> .....	53	405	1,833	384	719	1,747	4,615	10,187	(D)
Underground, total.....	748	2,509	10,553	2,368	4,181	10,108	23,048	28,587	1,641
Less than 0.40.....	8	51	82	49	101	82	105	157	5
0.40 to 0.59.....	14	74	238	69	165	226	317	373	17
0.60 to 0.79.....	16	194	726	171	310	691	947	1,126	78
0.80 to 0.89.....	16	163	703	162	317	701	1,059	1,273	34
0.90 to 0.99.....	9	257	1,252	249	456	1,211	1,658	2,107	87
1.00 to 1.19.....	27	677	3,204	658	1,090	3,145	4,796	5,974	377
1.20 to 1.39.....	13	148	604	139	242	575	1,108	1,448	78
1.40 to 1.59.....	9	112	567	107	191	547	1,055	1,289	52
1.60 to 1.79.....	9	72	362	67	112	344	695	847	25
1.80 to 1.99.....	6	78	416	64	116	328	985	1,145	58
2.00 to 2.39.....	5	27	116	26	46	113	397	449	24
2.40 to 2.99.....	5	30	137	30	47	137	468	540	19
3.00 and over.....	3	22	83	20	13	75	245	310	18
Undistributed <sup>4</sup> .....	609	604	2,063	557	975	1,933	9,213	11,549	769
Mining operations with preparation plants:									
Underground, total.....	10	672	2,942	502	966	2,159	3,674	6,673	131
Less than 0.79.....	5	493	2,168	344	774	1,463	2,693	5,238	67
1.00 and over.....	4	179	774	158	192	696	981	1,435	64
Undistributed <sup>4</sup> .....	1								
Strip-pits with preparation plants and combination mines with and without preparation plants, total.....									
Less than 2.00.....	39	4,312	23,497	4,006	8,006	20,804	48,070	87,252	1,604
2.00 and over.....	8	1,985	10,563	1,853	3,585	9,103	20,206	26,634	477
Undistributed <sup>4</sup> .....	4	308	1,599	278	473	1,401	2,580	4,262	153
Preparation plants only, total.....	27	2,019	11,335	1,875	3,948	10,300	25,284	56,356	974
Less than 1.50.....	79	1,190	5,639	1,059	1,996	4,989	14,478	63,191	(D)
1.50 to 1.99.....	9	114	402	101	181	369	824	1,900	(D)
2.00 to 2.99.....	4	39	140	38	74	139	359	1,448	41
3.00 to 3.99.....	15	242	1,230	215	460	1,112	2,490	10,868	143
4.00 and over.....	12	446	2,208	396	751	1,893	4,935	22,153	121
Undistributed <sup>4</sup> .....	14	290	1,416	259	454	1,266	5,068	22,873	940
Reclaiming operations with and without preparation plants:	25	59	243	50	76	210	802	3,949	158
Culm banks and dredges, total.....	63	563	2,710	513	989	2,430	8,749	12,792	712
Less than 0.79.....	5	27	58	24	43	49	70	88	4
0.70 to 1.39.....	8	184	936	172	362	874	1,794	2,561	84
1.40 to 2.99.....	5	43	159	40	74	153	337	394	59
3.00 and over.....	5	109	625	103	213	555	2,545	3,091	216
Undistributed <sup>4</sup> .....	40	200	932	174	297	799	4,003	6,658	349

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Represents tons of anthracite shipped per man-hour worked by production, development, and exploration workers.

<sup>2</sup>Includes data for separately reported central offices and related facilities. These were not distributed by detailed types of operation.

<sup>3</sup>Not shown since the cost of supplies, purchased fuel and electric energy, contract work, and purchased machinery installed exceeds value of shipments and receipts plus capital expenditures.

<sup>4</sup>Represents establishments reporting no anthracite shipments; or no production, development, or exploration worker man-hours; or with production, development, or exploration worker man-hours spent on exploration or development work amounting to 30 percent or more of total man-hours of production, development, and exploration workers; or with cost of contract work amounting to 30 percent or more of production, development, and exploration worker wages; or with number of working proprietors amounting to 30 percent or more of number of production, development, and exploration workers.

**TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963**

Ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
		INDUSTRY 1111.—ANTHRACITE							
Total.....	1,026	10,692	53,022	9,331	17,758	44,867	110,527	220,973	12,651
Less than 0.10.....	16	33	64	33	56	64	1,082	1,338	54
0.10 to 0.19.....	39	390	1,657	368	605	1,531	9,893	20,026	1,558
0.20 to 0.29.....	70	647	3,087	586	1,100	2,858	12,271	29,083	646
0.30 to 0.39.....	49	819	3,860	773	1,460	3,615	10,876	28,093	689
0.40 to 0.49.....	60	1,367	7,290	1,267	2,566	6,650	16,178	37,117	1,812
0.50 to 0.59.....	93	3,579	18,579	3,327	6,635	16,496	34,615	54,806	1,537
0.60 to 0.69.....	59	1,320	6,636	1,249	2,235	6,181	10,095	18,984	700
0.70 to 0.79.....	34	980	4,342	798	1,555	3,457	5,858	14,613	393
0.80 to 0.89.....	25	340	1,510	311	471	1,405	1,805	2,479	129
0.90 to 0.99.....	10	230	1,117	200	351	960	1,183	1,789	81
1.00 and over.....	56	455	1,802	395	682	1,537	1,409	2,776	155
No employees.....	507	-	-	-	-	-	5,491	9,852	3,034
Undistributed <sup>2</sup> .....	8	532	3,078	24	42	113	( <sup>3</sup> )	17	1,863
		INDUSTRY 1112.—ANTHRACITE MINING SERVICES							
Total.....	43	1,094	5,813	993	1,786	5,022	10,013	15,538	2,460
0.20 to 0.29.....	4	36	217	33	67	200	1,005	1,024	551
0.30 to 0.39.....	4	34	168	31	58	156	515	587	19
0.40 to 0.49.....	11	293	1,597	274	527	1,478	3,680	5,090	921
0.50 to 0.59.....	6	117	654	107	221	532	1,216	1,764	387
0.60 to 0.69.....	3	150	576	136	215	493	923	1,737	134
0.70 to 0.79.....	5	130	838	119	211	687	1,095	1,754	4
0.90 to 0.99.....	4	206	987	170	250	739	1,067	1,784	-
1.00 and over.....	4								
No employees.....	2	128	776	123	237	737	512	1,798	444

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Note that in computing these ratios, contract or subcontract employment serving the establishment is excluded. The cost of contract or subcontract work expressed as a percent of payroll for 1963 was 40 percent for the Anthracite Industry and 15 percent for the Anthracite Mining Services Industry.

<sup>2</sup>Represents establishments with zero or negative value added and, for number of employees and payroll, includes figures for separately reported central offices and related facilities.

<sup>3</sup>Not shown since cost of supplies, fuels, purchased electric energy, contract work, and purchased machinery exceeds value of shipments and receipts plus capital expenditures.



TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963

Value added per employee class <sup>1</sup>	Number of employees	Number of establishments with average employment of--							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1111.—ANTHRACITE									
Total.....	10,692	1,026	941	53	20	6	5	-	1
Less than \$3,000.....	360	62	59	2	1	-	-	-	-
\$3,000 to \$3,999.....	304	39	35	4	-	-	-	-	-
\$4,000 to \$4,999.....	345	40	37	2	1	-	-	-	-
\$5,000 to \$5,999.....	654	53	46	5	1	1	-	-	-
\$6,000 to \$6,999.....	913	35	27	4	3	-	1	-	-
\$7,000 to \$7,999.....	1,050	49	38	6	4	-	1	-	-
\$8,000 to \$8,999.....	883	33	25	5	1	1	1	-	-
\$9,000 to \$9,999.....	364	36	32	3	1	-	-	-	-
\$10,000 to \$12,499.....	3,059	50	38	7	1	2	1	-	1
\$12,500 to \$14,999.....	1,007	34	27	4	-	2	1	-	-
\$15,000 to \$17,499.....	365	23	18	3	2	-	-	-	-
\$17,500 to \$19,999.....	109	13	12	1	-	-	-	-	-
\$20,000 and over.....	759	49	37	7	5	-	-	-	-
Undistributed <sup>2</sup> .....	520	510	510	-	-	-	-	-	-
INDUSTRY 1112.—ANTHRACITE MINING SERVICES									
Total.....	1,094	43	26	9	7	1	-	-	-
Less than \$3,000.....	162	{ 1	-	1	-	-	-	-	-
\$3,000 to \$3,999.....	{ 4	2	1	1	1	-	-	-	-
\$4,000 to \$4,999.....	241	{ 2	1	-	1	-	-	-	-
\$5,000 to \$5,999.....	{ 4	2	1	1	-	1	-	-	-
\$6,000 to \$6,999.....	148	{ 1	1	-	-	-	-	-	-
\$7,000 to \$7,999.....	{ 5	3	-	2	-	-	-	-	-
\$8,000 to \$8,999.....	19	3	3	-	-	-	-	-	-
\$9,000 to \$9,999.....	73	3	1	2	-	-	-	-	-
\$10,000 to \$12,499.....	233	6	2	2	2	-	-	-	-
\$12,500 to \$14,999.....	97	5	4	-	1	-	-	-	-
\$15,000 to \$17,499.....	90	4	2	2	-	-	-	-	-
\$17,500 to \$19,999.....	31	{ 1	1	-	-	-	-	-	-
\$20,000 and over.....	2	2	2	-	-	-	-	-	-
Undistributed <sup>2</sup> .....	-	2	2	-	-	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Note that in computing these ratios, contract or subcontract employment serving the establishment is excluded. The cost of contract or subcontract work expressed as a percent of payroll for 1963 was 40 percent for the Anthracite Industry and 15 percent for the Anthracite Mining Services Industry.

<sup>2</sup>Represents establishments with no employees or with negative value added in mining and, for number of employees, figures for separately reported central offices and related facilities.

**TABLE 11. Hourly Earnings of Production, Development, and Exploration Workers for Establishments with 10 or More Employees (Pennsylvania): 1963**

Ind. code	Industry by hourly earnings classes	Number of--	
		Establishments	Employees <sup>1</sup>
1111	Anthracite, total.....	184	8,888
	Less than \$1.49.....	7	97
	\$1.50 to \$1.99.....	34	965
	\$2.00 to \$2.49.....	45	1,360
	\$2.50 to \$2.99.....	56	4,746
	\$3.00 to \$3.49.....	26	1,207
	\$3.50 to \$3.99.....	12	452
	\$4.00 to \$4.49.....	1	61
	\$4.50 and over.....	3	
1112	Anthracite Mining Services, total.....	26	1,018
	\$1.50 to \$1.99.....	1	235
	\$2.00 to \$2.49.....	5	
	\$2.50 to \$2.99.....	10	407
	\$3.00 to \$3.49.....	7	231
	\$3.50 to \$3.99.....	1	145
	\$4.00 to \$4.49.....	2	

<sup>1</sup>Excludes figures for separately reported central offices and related facilities.

**TABLE 12. Distribution of Operating Companies, by Employment Size and by Number of Establishments: 1963**

Establishment count	Number of--		Number of establishments with average employment of--									
	Operating companies	Employees	Total	0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1111.—ANTHRACITE												
Total.....	987	110,692	1,026	723	119	99	53	20	6	5	-	1
Multiunit companies, total.....	17	15,226	56	10	5	9	15	9	5	2	-	1
1 establishment <sup>2</sup> .....	5	96	5	-	1	2	2	-	-	-	-	-
2 establishments.....	6	563	12	1	2	3	2	1	1	-	-	-
3 or 4 establishments.....	3	2,209	9	1	1	1	2	2	1	-	-	1
5 or 6 establishments.....	1	1,860	6	-	-	-	-	2	2	2	-	-
7 to 9 establishments.....	1		8	5	-	-	2	1	-	-	-	-
15 to 19 establishments.....	1		16	3	1	3	7	1	1	-	-	-
Single unit companies.....	970	5,466	970	713	114	90	38	11	1	3	-	-
INDUSTRY 1112.—ANTHRACITE MINING SERVICES												
Total.....	41	1,094	43	9	8	9	9	7	1	-	-	-
Multiunit companies, total.....	6	340	8	-	-	2	3	3	-	-	-	-
1 establishment <sup>2</sup> .....	5	340	5	-	-	1	2	2	-	-	-	-
3 or 4 establishments.....	1		3	-	-	1	1	1	-	-	-	-
Single unit companies.....	35	754	35	9	8	7	6	4	1	-	-	-

Standard notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Includes figures for separately reported central offices and related facilities. These were not distributed by number of establishments operated.

<sup>2</sup>Represents companies having at least one establishment classified in other industries.



## BITUMINOUS COAL AND LIGNITE MINING

This report shows 1963 Census of Mineral Industries statistics for establishments classified in Major Industry Group 12, Bituminous Coal and Lignite Mining. This major group covers establishments primarily engaged in producing bituminous coal and lignite. The separate industries included in this group are as follows:

### SIC Code and Title

1211—Bituminous Coal

1212—Lignite

1213—Bituminous Coal and Lignite Mining Services

### INDUSTRY DESCRIPTIONS

Industry 1211—Bituminous Coal.—This industry represents establishments primarily engaged in producing bituminous coal or in developing bituminous coal mines. This industry includes underground mining, auger mining, strip mining, and coal cleaning, crushing, screening, and sizing plants whether or not operated in conjunction with the mines served.

Industry 1212—Lignite.—This industry represents establishments primarily engaged in producing lignite or in developing lignite mines.

Industry 1213—Bituminous Coal and Lignite Mining Services.—This industry represents establishments primarily engaged in overburden stripping and strip and auger mining of bituminous coal or lignite for others on a contract, fee, or other basis and other establishments primarily engaged in performing bituminous coal and lignite mining services, such as drilling, shaft sinking, and mine tunnelling. This industry is a combination of two industries, 1215 Bituminous Coal and Lignite Stripping and Auger Mining Services, and 1214, Bituminous Coal and Lignite Mining Services, Except Stripping, N.E.C., for which separate figures were tabulated for years prior to 1963.

The production of coke is classified in industry 3312, Blast Furnaces and Steel Mills. The production of fuel briquets and packaged fuel is classified in industry 2999, Petroleum and Coal Products, N.E.C., and the production of manufactured gas from coal in industry 4925, Mixed, Manufactured, or L.P. Gas Production and/or Distribution.

### SUMMARY OF FINDINGS

The combined value of shipments of the industries in Major Group 12 amounted to \$2,396 million in 1963. Of this total, the Bituminous Coal Industry had shipments of \$2,358 million, including \$284 million for raw coal sold or transferred to other establishments in the industry for preparation, and \$11 million for coal purchased and resold without further processing. The value of shipments of the Lignite Industry in 1963 was \$14 million. The remainder was accounted for by the Bituminous Coal and Lignite Mining Services Industry, with receipts of \$24 million.

Net shipments of bituminous coal and lignite in 1963 amounted to 464 million tons. An additional 0.6 million tons of such coal were mined and used in the same establishment for power or heat.

Net production, net shipments, and transfers for preparation.—The figures for “net shipments” represent all prepared coal shipped plus raw coal shipped for use without preparation. The net shipments figures exclude coal used at the producing mine or preparation plant for power or heat and coal purchased and resold without further processing. They also exclude the raw coal sold or transferred to other establishments for preparation, thus eliminating the duplication in “total” shipments which results from inclusion of both the raw coal sold or transferred for preparation and the clean coal recovered therefrom. For individual States and counties, however, the net shipments figures include the prepared coal recovered from raw coal mined in other States or counties.

“Net production,” on the other hand, represents the net tonnage of coal mined, excluding washery and other refuse, based on the location of the mining operation. For individual States and counties, such figures represent the net usable product from mines and dredges located within the boundaries of the designated areas. At the mine level, the net production includes the tonnage of prepared coal mined and prepared at the same establishment, coal mined and used at the same establishment for power or heat, the prepared or sized coal equivalent of raw coal mined for preparation at other establishments, and raw coal sold for use without preparation. In 1963, about 86 percent of all bituminous coal net shipments represented coal prepared prior to use. This includes 64 percent which was mechanically cleaned and 22 percent which was only crushed, screened, or sized. For lignite, no coal was mechanically cleaned, but 93 percent was crushed, screened, or sized. Separate figures are shown wherever possible for mechanical cleaning and for operations which crush, screen, or size only.

The production index for the primary products of the Bituminous Coal and Lignite Mining Industries increased to 120 in 1963 from the 1958 level of 108. The unit value index for 1963 was 98 compared to 108 in 1958. Both indexes were computed on a basis of 1954 = 100. The 1963 production and unit value indexes for the individual industries in this group were, respectively: for bituminous coal, 119 and 98; for lignite, 118 and 112; for bituminous coal and lignite mining services, 134 and 99.

Contract Work.—Establishments classified in the Bituminous Coal and Lignite Mining Services Industries reported receipts of \$24 million for services performed. A total of 1,435 persons were engaged in these services, accounting for a little over one percent of the total persons engaged in the Bituminous Coal and Lignite Mining Industries.

Stripping and auger mining was the principal activity of bituminous coal contractors. Such coal represents an increasing proportion of the total coal mined. Bituminous coal operators reported a total net production of 159 million tons of strip-pit and auger mined coal, of which 8.5 million tons were mined for them by contractors.

Establishments classified in the Bituminous Coal and Lignite Services Industries were permitted to file one report for all mining services performed in the United States. These reports were classified on the basis of the principal type of service performed and the principal industries served to determine their industry or subindustry classification. Each report included data on the amount received for services, the number of employees in March, the tonnage of raw coal mined, and capital expenditures during 1963, by State and county. For county statistics, all other figures in each report were allocated on the basis of these reported data.

The figures in this report for the Bituminous Coal and Lignite Services Industry cover, except for hauling, all service activities which represent an integral part of bituminous coal and lignite mining operations. Receipts by such contractors represent 36 percent of the total payments for contract services reported by the Bituminous Coal and Lignite Industries. In addition, a small amount of such contract work was done by operators of bituminous coal and lignite mines, presumably primarily for other coal mines, amounting

to about 3 percent of payments for contract work by the Bituminous Coal and Lignite Industries. The statistics from these two sources probably represent nearly complete coverage of services of the type classified in the mineral industries.

Payments for contract work by the Bituminous Coal and Lignite Industries exceeded reported receipts for contract work by about \$40 million. Part of the difference between reported receipts and payments is accounted for by the cost of hauling coal beyond the mine property. It seems likely that a large part of the remainder represents payments made to companies engaged in contract construction of preparation plants and other facilities at mine and preparation plant properties. Capital expenditures for preparation plant and other construction, including capitalized repairs and improvements, amounted to about \$38 million for establishments classified in the bituminous coal and lignite industries. Establishments reporting large capital expenditures of this type usually also reported substantial payments to contractors. The table below summarizes for the United States and for selected divisions and States, the available data on payments and receipts for contract services of establishments included in 1963 in the bituminous coal and lignite mining industries and the corresponding capital expenditures by bituminous coal and lignite mine and preparation plant operators for preparation plant and other construction.

PAYMENTS AND RECEIPTS FOR BITUMINOUS COAL AND LIGNITE MINING SERVICES AND AMOUNTS CAPITALIZED FOR CONSTRUCTION AT ESTABLISHMENTS IN THE BITUMINOUS COAL AND LIGNITE MINING INDUSTRIES IN THE UNITED STATES, BY SELECTED DIVISIONS AND STATES: 1963

(In thousands of dollars)

Divisions and States	Cost of contract work as reported by mine or plant operators	Receipts for services reported in the bituminous coal and lignite mining industries			Excess of contract payments over receipts	Capital expenditures by operators for construction
		Total	By contractors	By operators		
United States.....	65,029	25,391	23,575	<sup>1</sup> 1,816	39,638	38,302
Middle Atlantic (Pennsylvania).....	21,376	7,514	7,139	375	13,862	9,344
East North Central.....	6,747	3,532	3,220	312	3,215	7,345
Ohio.....	4,800	3,167	2,867	300	1,633	3,019
Illinois.....	1,366	52	52	-	1,314	2,314
South Atlantic.....	20,990	9,318	8,979	339	11,672	12,296
Virginia.....	6,304	4,581	4,462	119	1,723	1,969
West Virginia.....	14,593	4,664	4,517	147	9,929	10,259
East South Central.....	11,833	2,821	2,155	666	9,012	7,514
Kentucky.....	8,365	713	550	163	7,652	6,677

- Represents zero.

<sup>1</sup>Excludes the Lignite Industry, amounting to less than \$100 thousand.

**Secondary Production.**—The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of establishments in the industry, but also their activities in the production of secondary products and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7 to 12) with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5 which shows the value of primary and secondary

establishments classified in other industries. However, secondary products and services in the bituminous coal and lignite mining industries amounted to only about 0.2 percent of the total value of shipments and receipts for these industries. Only 0.04 percent of bituminous coal and lignite was produced in other industries, primarily in the clay and related products industries.

#### COMPARABILITY WITH BUREAU OF MINES STATISTICS

Some differences occur in the similar statistics prepared by the two agencies, arising principally from differences in methods followed and objectives sought. Some of the comparable product statistics of the two agencies are shown in the table below. The reasons for such differences, to the extent that they pertain to statistics for the Bituminous Coal and Lignite Mining Industries, are summarized below:

1. The Bureau of Mines excludes all mines having an output of less than 1,000 tons a year, whereas the Bureau of the Census excludes only small establishments whose value of products and reported costs for production, development, or maintenance work were less than \$500. However, the contribution to product of such excluded establishments is usually small.

2. The Bureau of Mines statistics on both production and shipments are based primarily on data furnished by producers. These data are supplemented, however, by data from various State mine department records and, in a few instances, from railroad car loadings, in order to obtain coverage of production not directly reported. The Bureau of Mines figures represent the quantity and value of net marketable coal produced, excluding washery and other refuse, distributed among the States and counties from which the coal originated. The Census statistics are on an establishment basis and take into account the actual location and type of product of the establishment as reported by the respondent, making a distinction between "net production" and "net shipments." The Bureau of Mines statistics, therefore, are comparable by State and county only with the Census statistics for "net production" and are not comparable with the Census State and county figures for "net shipments."

3. Both the Bureau of Mines and the Census Bureau collected information on mechanical cleaning of coal. However, the Bureau of Mines credits the clean coal to the location or locations at which the coal was mined, whereas the Census statistics show the clean coal shipped according to the location of the cleaning plant. The Census clean coal statistics represent mechanical cleaning at plants operated in conjunction with mines and at separately operated cleaning plants (these are included in the Bituminous Coal Industry) and exclude figures for coal cleaning at preparation plants operated as parts of coke ovens or other manufacturing establishments. The Bureau of Mines includes data for these consumer operated plants in their statistics on mechanical cleaning.

Both agencies obtain information on mechanical crushing and the Census, in addition, obtains data for screening and sizing. The Bureau of Mines figures for mechanical crushing show all coal crushed at mines, including that which was both crushed and mechanically cleaned. The Census figures represent coal prepared only by mechanical crushing, screening, and sizing.

4. The Bureau of Mines commodity statistics include data for State-owned or State-operated mines producing coal, with inmate labor, for use at State institutions. Government institutions, in general, are out of scope of the Census.

5. The Bureau of the Census collects information on coal purchased and resold without further processing. Data for such resales are not collected by the Bureau of Mines. The Census figures show 2.9 million tons purchased for \$10.1 million and resold for \$11.4 million.

6. Differences exist in establishment coverage in certain areas for both collection agencies.

## 1963 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Bureau of the Census statistics			Bureau of Mines statistics <sup>1</sup>	
	Production  (1,000 short tons)	Shipments including interplant transfers		Production  (1,000 short tons)	Value of production <sup>1</sup>  (\$1,000)
		Quantity (1,000 short tons)	Value ( \$1,000)		
BITUMINOUS COAL					
Net production and shipments.....	459,200	459,502	2,059,734	456,223	2,007,627
Division and State					
Middle Atlantic (Pennsylvania).....	<sup>2</sup> 72,899	71,886	362,593	71,501	350,355
East North Central, total.....	<sup>2</sup> 105,282	105,926	400,935	103,626	389,798
Ohio.....	37,974	38,465	144,980	36,790	136,123
Indiana.....	<sup>2</sup> 15,241	15,216	57,593	15,100	57,078
Illinois.....	52,067	52,245	198,362	51,736	196,597
West North Central, total.....	5,592	5,595	22,959	5,556	22,757
Iowa.....	1,226	1,230	4,281	1,213	4,246
Missouri.....	4,366	4,365	18,678	3,174	13,204
Kansas.....				1,169	5,307
South Atlantic.....	165,055	164,232	778,470	164,266	760,256
Maryland.....	1,203	1,196	4,617	1,162	4,334
Virginia.....	29,775	30,816	129,289	30,531	120,903
West Virginia.....	134,071	132,213	644,543	132,568	635,001
East South Central, total.....	94,510	96,049	410,155	95,830	409,395
Kentucky.....	75,010	76,457	293,931	77,350	295,477
Tennessee.....	6,344	6,413	25,087	6,121	22,709
Alabama.....	13,156	13,179	91,137	12,359	91,209
West South Central, total.....	1,242	1,241	7,306	1,229	7,182
Arkansas.....	227	228	1,528	221	1,507
Oklahoma.....	1,015	1,013	5,778	1,008	5,675
Mountain.....	13,514	13,518	69,916	13,172	60,594
Montana.....	214	56	387	53	398
Wyoming.....	3,149	3,149	8,893	3,124	9,934
Colorado.....	4,022	3,972	23,513	3,690	21,882
New Mexico.....	1,962	1,960	6,634	1,945	5,621
Utah.....	4,322	4,379	30,473	4,360	22,759
Pacific, total.....	1,058	1,055	7,400	1,043	7,290
Washington.....	200	199	1,506	190	1,379
Alaska.....	858	856	5,894	853	5,911
LIGNITE					
Net production and shipments.....	4,989	4,984	13,640	2,705	5,884
Division and State					
West North Central and West South Central..	4,676	4,667	12,953	2,415	5,318
Mountain (Montana and California).....	313	317	687	290	566
BITUMINOUS COAL AND LIGNITE					
Method of Mining					
Strip-pit.....	<sup>3</sup> 147,338	(NA)	(NA)	144,141	(NA)
Underground.....	<sup>3</sup> 305,393	(NA)	(NA)	302,256	(NA)
Auger and dredge.....	11,458	(NA)	(NA)	12,531	(NA)
Mechanical Cleaning					
Raw coal cleaned.....	364,068	(NA)	(NA)	362,141	(NA)
Clean coal produced or shipped.....	(NA)	295,225	1,428,452	289,462	(NA)

NA Not available.

<sup>1</sup>Figures for quantity and value of shipments are not available.

<sup>2</sup>Excludes some bituminous coal produced in industries other than the bituminous coal industry. Such tonnage was excluded for Pennsylvania and Indiana, amounting to 48 thousand tons in the two States combined.

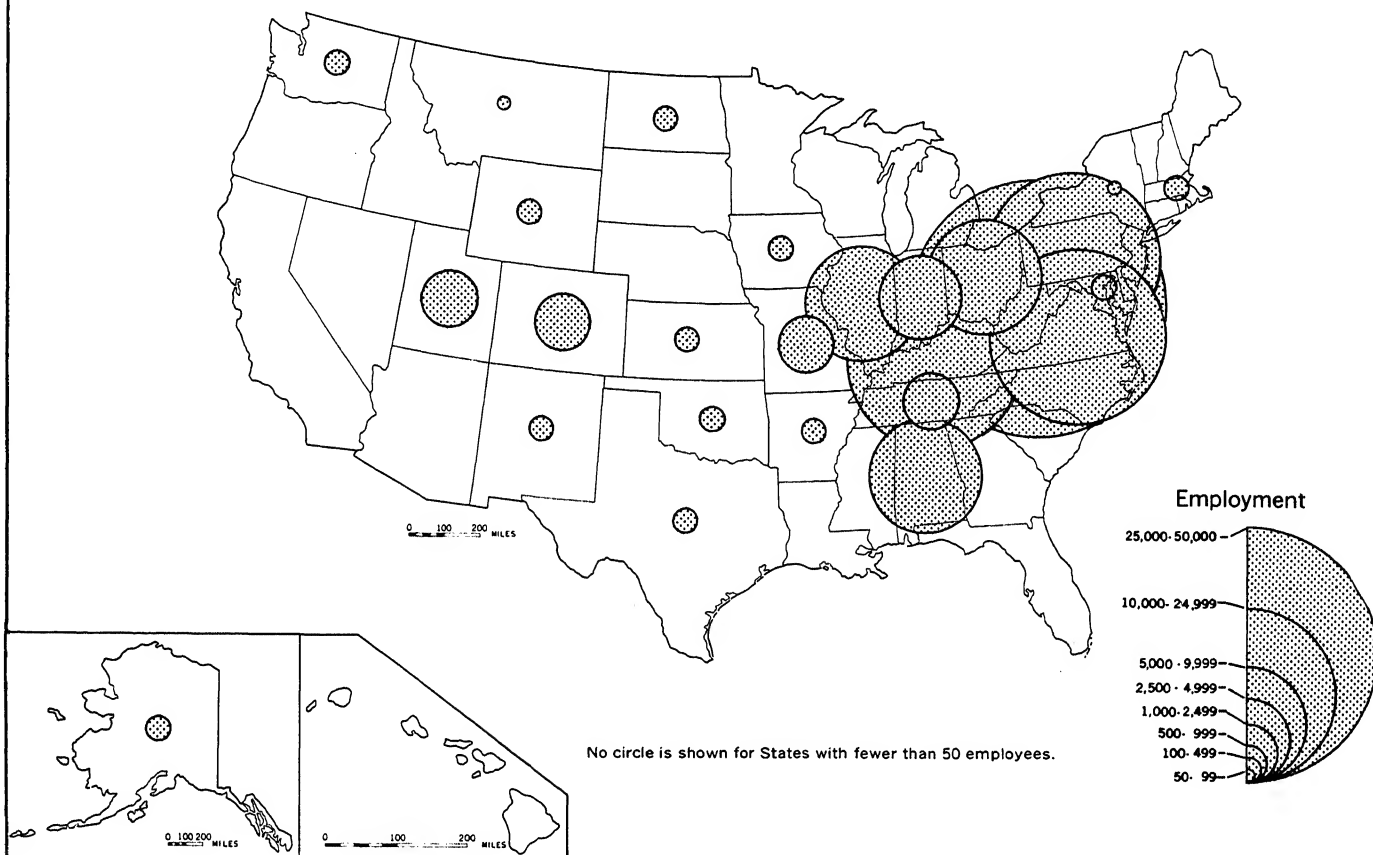
<sup>3</sup>Includes some bituminous coal produced in industries other than the bituminous coal industry. Such tonnage was excluded for Pennsylvania and Indiana, amounting to 48 thousand tons in the two States combined.





# BITUMINOUS COAL AND LIGNITE MINING

Distribution of Employment by State: 1963



Employment and Production: 1840-1963

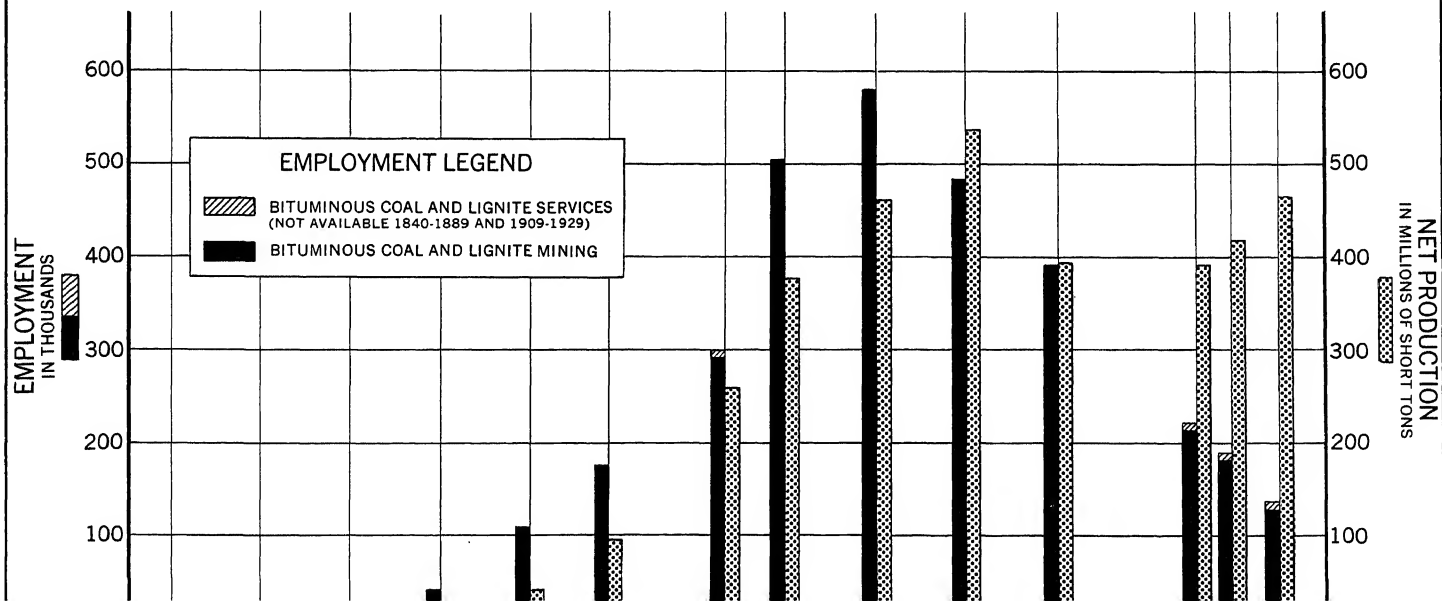


TABLE 1. General Statistics: 1963 and Earlier Years

Year	Operating companies (number)	Establishments		All employees			Production, development, and exploration workers			Selected expenses				Value of net ship- ments and receipts (\$1,000)	Net pro- duction of coal <sup>1</sup> (1,000 short tons)	Capital ex- pendi- tures (\$1,000)	Horse- power rating of power equipment (1,000 hp.)
		Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)	Value added in mining (\$1,000)	Supplies, purchases for resale, and purchased energy (\$1,000)	Coal received for prepara- tion (\$1,000)	Contract or sub- contract work (\$1,000)	Purchased machinery installed (\$1,000)				
12. —BITUMINOUS COAL AND LIGNITE MINING																	
1211. —Bituminous Coal																	
1963.....	5,663	6,115	1,143	132,046	752,491	116,975	214,421	642,338	1,578,078	575,536	( <sup>2</sup> )	64,742	190,805	2,063,165	438,999	210,835	6,070 (NA)
1958.....	6,112	6,725	1,346	185,933	905,041	161,908	264,779	753,320	1,591,321	447,363	325,724	70,346	147,732	2,065,892	413,449	184,262	(NA)
1954.....	5,922	6,652	1,438	217,186	868,759	198,134	323,098	759,639	1,402,551	383,424	204,074	54,613	119,159	1,784,798	387,531	117,037	6,108
1939 <sup>2</sup> .....	5,021	5,716	(NA)	388,955	474,747	369,265	542,510	430,564	607,318	411,841	(NA)	1,899	(NA)	727,358	391,729	(NA)	3,344
1935 <sup>2</sup> .....	(NA)	5,311	(NA)	745,142	745,208	435,142	(NA)	402,677	554,894	103,581	(NA)	(NA)	(NA)	658,475	372,254	(NA)	(NA)
1929 <sup>2</sup> .....	(NA)	4,995	(NA)	482,521	633,566	458,835	(NA)	574,919	819,976	144,828	(NA)	1,890	34,947	966,694	537,443	(NA)	3,125
1919 <sup>2</sup> .....	(NA)	6,670	(NA)	580,047	752,205	546,412	(NA)	683,442	963,080	180,559	-	2,873	(NA)	1,146,312	246,426	(NA)	2,158
1909 <sup>2</sup> .....	3,549	4,400	(NA)	506,184	291,167	488,307	(NA)	341,738	57,672	57,672	(NA)	2,406	(NA)	401,816	276,953	(NA)	1,231
1902 <sup>2</sup> .....	4,409	5,652	(NA)	295,051	195,994	928,638	(NA)	181,482	264,815	24,799	(NA)	1,244	(NA)	290,858	260,217	(NA)	521
1889 <sup>2</sup> .....	(NA)	10,121	(NA)	175,356	69,852	169,104	(NA)	65,658	85,677	8,006	(NA)	822	(NA)	109,505	109,685	(NA)	(NA)
1880 <sup>2</sup> .....	(NA)	118,144	(NA)	109,014	33,161	(NA)	(NA)	48,610	4,857	4,857	(NA)	(NA)	(NA)	11,534,667	11,42,841	(NA)	26
1870 <sup>2</sup> .....	(NA)	1,337	(NA)	41,733	21,334	(NA)	(NA)	33,015	2,073	2,073	(NA)	(NA)	(NA)	35,088	19,279	(NA)	14
1860 <sup>2</sup> .....	(NA)	446	(NA)	11,360	4,147	(NA)	(NA)	(NA)	7,259	1,115	(NA)	(NA)	(NA)	8,374	6,219	(NA)	(NA)
1850 <sup>2</sup> .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	1,905	2,308	(NA)	(NA)
1840 <sup>2</sup> .....	(NA)	(NA)	(NA)	3,834	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	12,108	(NA)	(NA)
1212. —Lignite																	
1963.....	52	59	6	512	2,760	441	884	2,245	11,830	52,292	( <sup>3</sup> )	287	4,336	13,981	4,989	4,633	76
1958.....	53	58	8	510	2,693	437	844	2,261	9,309	1,603	-	33	1,522	11,035	4,231	1,432	(NA)
1954.....	56	60	9	574	2,588	505	901	2,177	9,093	1,120	(NA)	206	607	10,387	4,245	639	75
1939 <sup>2</sup> .....	130	313	(NA)	1,595	1,603	1,480	3,027	1,384	2,879	567	(NA)	11	(NA)	3,457	2,978	(NA)	21
1213. —Bituminous Coal Mining Services																	
1963.....	131	131	17	1,304	7,012	1,213	2,337	6,372	16,780	6,250	(X)	1,104	2,719	23,981	(13)	2,872	135
1958.....	157	157	21	1,520	7,332	1,385	2,547	6,519	15,114	5,519	(X)	872	2,940	21,649	(13)	2,796	(NA)
1954.....	152	152	20	1,446	6,068	1,331	2,458	5,511	12,517	4,187	(X)	751	2,552	17,596	(13)	2,411	164
1939.....	32	(NA)	(NA)	228	326	199	365	240	477	135	(X)	(NA)	(NA)	612	(13)	41	8
1902 <sup>14</sup> .....	(NA)	(NA)	(NA)	5,040	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	1,244	(13)	(NA)	(NA)

Note: See appendix A for explanation of column captions. For more detailed historical statistics for these industries see table 1 of the corresponding chapter of the 1954 Census of Mineral Industries, Volume 1.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Represents the clean-coal equivalent of all coal mined, including coal produced and used at the same establishment for power or heat.

<sup>2</sup>Excludes figures for Alaska.

<sup>3</sup>Represents number of mines.

<sup>4</sup>For 1939 and probably for earlier years, excludes the cost of purchases for resale.

<sup>5</sup>Figures for cost of coal received for preparation are included with those for supplies, purchases for resale, and purchased energy.

<sup>6</sup>For years prior to 1939, figures for the Lignite Industry are included with those for the Bituminous Coal Industry.

<sup>7</sup>Excludes data for persons engaged at central offices not located at the mine property.

<sup>8</sup>Adjusted to exclude data for coke manufacture at coal mines, to include "anthracite" production outside of Pennsylvania, and to transfer from wages to cost of supplies, the cost of explosives, oil, and blacksmithing furnished to miners.

<sup>9</sup>Figures for average employment.

<sup>10</sup>For 1889, includes data for 9,920 "local mines and farmers' banks," producing about 2 percent of all coal, for which no data are available on labor or expenditures.

<sup>11</sup>Includes data for 5,148 mines, producing 917 thousand tons of coal valued at \$1,093 thousand, representing "irregular" operations for which no other data are available.

<sup>12</sup>Reported as "27,603,191 bushels raised" of bituminous coal and 3,803 tons of anthracite raised outside of Pennsylvania.

<sup>13</sup>Coal mined by the Bituminous Coal Services Industry is included in the production shown for the Bituminous Coal and Lignite Industries.

<sup>14</sup>Represents number of employees engaged in all contract work and payments for all contract work as reported by companies operating bituminous coal and lignite mines.

**TABLE 2A. General Statistics by Geographic Areas and Type of Operation: 1963 and 1958**

Geographic area and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and machinery installed	Value of shipments and receipts <sup>2</sup>	Net production of coal <sup>2</sup>	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 short tons)	(\$1,000)	(number)	(\$1,000)
	1211.—BITUMINOUS COAL													
United States, total.....	6,115	1,143	132,046	752,491	116,975	214,421	642,338	1,578,078	991,083	2,358,326	<sup>3</sup> 458,999	210,835	185,933	1,591,321
<u>Geographic Area</u>														
Northeast Region....	1,174	186	24,196	142,991	20,823	38,874	114,974	275,840	206,899	438,865	72,899	43,874	37,161	286,384
Pennsylvania.....	1,174	186	23,957	140,434	20,823	38,874	114,974	275,840	206,899	438,865	72,899	43,874	36,791	286,384
East North Central Division.....	554	167	20,263	135,595	17,529	34,210	114,906	307,782	180,805	433,097	105,129	55,490	25,201	283,283
Ohio.....	382	80	8,316	50,515	7,090	13,759	41,514	104,869	83,056	166,206	37,821	21,719	9,938	100,122
Indiana.....	69	20	2,959	19,710	2,572	4,763	16,693	45,969	21,666	57,793	15,241	9,842	4,104	44,268
Illinois.....	103	67	8,988	65,370	7,867	15,688	56,699	156,944	76,083	209,098	52,067	23,929	11,139	138,893
West North Central Division.....	85	12	1,675	9,881	907	1,923	5,649	17,927	11,967	22,997	5,592	6,897	1,877	16,022
Iowa.....	36	3	274	1,246	254	561	1,131	3,350	1,556	4,292	1,226	614	421	3,552
Missouri.....	35	6	1,137	6,591	415	856	2,745	14,577	10,411	18,705	4,366	6,283	1,204	9,832
Kansas.....	14	3	264	2,044	238	506	1,773							
South Atlantic Division.....	2,390	445	53,061	296,987	47,904	87,605	259,258	602,800	350,067	893,578	165,055	59,289	75,925	636,742
Maryland.....	64	4	413	1,455	398	671	1,408	3,709	2,063	5,185	1,203	587	540	2,985
Virginia.....	769	126	11,349	47,858	10,309	17,686	42,580	95,639	68,131	154,963	29,775	8,807	13,737	100,135
West Virginia.....	1,554	315	41,293	247,663	37,192	69,241	215,260	503,435	279,869	733,409	134,071	49,895	61,634	533,574
East South Central Division.....	1,658	280	28,240	139,755	25,662	44,686	123,414	307,202	205,851	475,789	94,510	37,264	38,511	302,832
Kentucky.....	1,194	222	20,740	101,309	18,888	33,129	90,534	219,303	163,266	353,149	75,010	29,420	28,397	227,458
Tennessee.....	271	17	1,835	8,044	1,648	2,785	7,080	20,146	10,043	27,015	6,344	3,174	2,661	16,575
Alabama.....	193	41	5,665	30,402	5,126	8,772	25,800	67,753	32,542	95,625	13,156	4,670	7,453	58,799
West South Central Division.....	40	7	453	2,430	421	773	2,215	5,513	2,688	7,381	1,242	820	1,059	10,618
Arkansas.....	17	1	107	523	105	206	517	1,348	493	1,528	227	313	252	2,081
Oklahoma.....	23	6	346	1,907	316	567	1,698	4,165	2,195	5,853	1,015	507	807	8,537
Mountain Division... Wyoming.....	195	41	3,771	21,548	3,381	5,614	19,036	54,864	30,603	79,177	13,514	6,290	5,666	48,051
Colorado.....	18	6	304	1,485	265	402	1,286	6,185	2,951	8,893	3,149	243	506	4,244
Utah.....	100	16	1,374	8,118	1,242	2,205	7,214	19,470	6,874	24,033	4,022	2,311	2,016	16,348
Pacific Division.... Washington.....	36	16	1,726	9,941	1,556	2,502	8,880	23,337	17,654	39,213	4,322	1,778	2,824	25,376
Alaska.....	19	5	387	3,304	348	736	2,886	6,150	2,203	7,442	1,058	911	533	7,389
	9	2	493	41,078	177	291	973	1,141	412	1,548	200	5	276	1,609
	10	3	194	2,226	171	445	1,913	5,009	1,791	5,894	858	906	257	5,780
<u>Type of Operation</u>														
United States, total.....	6,115	1,143	132,046	752,491	116,975	214,421	642,338	1,578,078	991,083	2,358,326	<sup>2</sup> 458,999	210,835	185,933	1,591,321
Producing establishments, total.....	6,078	1,142	<sup>5</sup> 131,902	<sup>5</sup> 751,606	<sup>6</sup> 116,866	<sup>6</sup> 214,219	<sup>6</sup> 41,721	<sup>6</sup> 1,577,469	<sup>6</sup> 983,823	<sup>6</sup> 2,358,398	<sup>2</sup> 539,866	<sup>6</sup> 202,894	<sup>5</sup> 185,710	1,590,761
Mines only:														
Strip-pit.....	570	60	5,191	27,650	4,693	9,145	24,797	83,374	45,393	116,480	34,783	12,287	5,677	72,068
Underground.....	3,938	378	34,560	135,625	31,800	51,025	122,598	250,107	99,760	323,451	8,666	26,410	42,067	247,103
Auger.....	97	4	435	1,969	402	740	1,889	7,092	4,729	9,786	3,367	2,035	624	5,862
Strip-pit and underground....	16	7	378	1,605	348	667	1,478	4,162	1,842	5,131	1,242	873	277	2,606
Strip-pit and auger.....	64	13	884	5,159	806	1,611	4,597	16,554	8,110	22,035	6,357	2,629	832	12,549
Other combinations.....	11	7	1,464	9,578	1,247	2,291	7,631	15,451	9,319	24,255	6,427	515	1,071	12,108
Mines with preparation plants:														
With mechanical cleaning:														
Strip-pit.....	108	83	6,933	54,075	6,178	13,102	48,110	175,034	99,622	234,818	61,497	39,838	8,658	143,498
Underground....	301	276	52,765	343,023	48,174	91,043	303,167	690,656	307,553	937,098	185,524	61,111	87,471	768,319
Strip-pit and underground..	17	16	2,942	19,539	2,772	5,328	18,136	47,562	24,108	65,726	13,483	5,944	3,019	28,095
Strip-pit and auger.....	15	13	791	4,704	730	1,652	4,032	10,864	13,134	22,627	5,363	1,371	755	13,349
Other combinations and dredge.....	20	15	3,084	22,446	2,854	5,674	20,228	47,760	22,895	66,860	14,857	3,795	4,151	29,355
With mechanical crushing, screening, or sizing only:														
Strip-pit:														
With crushing.....	185	68	3,849	21,032	3,490	7,216	18,922	62,874	43,058	86,977	24,506	18,955	5,284	56,237
With screening or sizing only	48	10	599	2,987	504	1,109	2,512	8,299	4,299	11,073	2,745	1,525	967	9,233

See footnotes at end of table.

**TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Geographic area and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and machinery installed	Value of shipments and receipts <sup>2</sup>	Net production of coal <sup>2</sup> (1,000 short tons)	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 short tons)	(\$1,000)	(number)	(\$1,000)
1211.—BITUMINOUS COAL—Continued														
Type of Operation—Continued														
Producing establishments—Con.														
Mines with preparation plants—Continued														
With mechanical crushing, screening, or sizing only—Continued														
Underground:														
With crushing.....	236	94	7,088	36,052	6,548	11,910	32,859	72,709	31,911	93,876	20,799	10,744	14,130	102,579
With screening or sizing only.....	193	24	6,216	67,848	6,201	63,458	67,300	612,691	65,884	616,931	4,269	61,644	4,594	26,452
Auger.....	18	1	138	741	129	195	682	2,833	1,010	3,692	1,091	151	260	2,208
Strip-pit and auger.....	48	27	1,446	7,913	1,337	2,785	7,352	21,729	16,443	34,736	10,502	3,436	1,276	12,518
Other combinations.....	19	12	531	2,561	484	906	2,315	6,322	5,935	11,522	2,426	735	1,353	13,223
Preparation plants only:														
Mechanical cleaning.....	73	25	1,911	11,684	1,702	3,130	10,187	30,281	188,333	211,168	38,998	7,446	2,186	22,966
Mechanical crushing.....	88	8	660	63,177	6564	61,073	62,536	69,629	644,285	652,521	13,319	61,393	846	9,026
Mechanical screening and sizing only.....	13	1	100	434	94	159	393	1,486	6,200	7,629	1,644	57	212	1,407
Nonproducing establishments.....	37	1	6149	6193	6114	6212	6642	6648	68,922	-	-	69,570	223	560
Geographic Area and Selected Types of Operation														
NORTHEAST REGION.....	1,174	186	24,196	142,991	20,823	38,874	114,974	275,840	206,899	438,865	272,899	43,874	37,161	286,384
Pennsylvania.....	1,174	186	23,957	140,434	20,823	38,874	114,974	275,840	206,899	438,865	272,899	43,874	36,791	286,384
Producing establishments:														
Mines only:														
Strip-pit.....	234	20	1,838	8,467	1,663	3,287	7,811	23,517	14,059	32,758	79,216	4,818	1,746	19,092
Underground.....	630	32	5,554	27,240	5,004	8,015	23,324	48,564	21,280	64,400	15,406	5,444	8,246	59,296
Auger.....	21	-	68	262	61	106	248	867	428	1,184	390	111	(NA)	(NA)
Strip-pit and auger.....	17	2	238	1,291	220	424	1,169	3,618	2,090	5,492	1,552	216	106	924
Other combinations.....	6	1	67	248	66	128	239	788	529	1,028	204	289	(NA)	(NA)
Mines with preparation plants:														
With mechanical cleaning:														
Strip-pit.....	18	10	477	2,402	421	1,024	2,098	6,861	7,059	12,062	2,883	1,858	869	9,531
Underground.....	53	50	10,329	68,649	9,431	17,778	59,925	140,794	68,735	193,938	33,805	15,591	18,029	140,032
Strip-pit and auger.....	10	9	608	3,440	556	1,319	2,869	8,460	10,871	18,256	4,360	1,075	1,185	7,714
Strip-pit and underground and other combinations..	6	5	272	1,445	236	471	1,213	3,139	2,952	4,989	1,181	1,102		
With mechanical crushing, screening, or sizing only:														
Strip-pit:														
With crushing.....	55	22	1,187	5,470	1,113	2,334	5,103	14,873	8,013	20,456	5,405	2,430	1,908	15,180
With screening or sizing only.....	15	7	308	1,558	261	604	1,326	4,972	2,463	6,457	1,600	978	323	3,493
Underground:														
With crushing.....	32	12	752	3,830	673	1,211	3,332	7,042	2,448	8,732	2,008	758	2,396	14,869
With screening or sizing only.....	13	3	230	1,364	218	412	1,314	2,150	1,087	2,619	640	618	601	3,032
Strip-pit and underground	8	3	171	691	153	295	620	1,258	1,482	2,689	648	51	343	2,859
Strip-pit and auger and auger only.....	18	5	305	1,506	284	583	1,415	3,588	3,098	6,395	1,721	291	101	806
Preparation plants only:														
Mechanical cleaning.....	12	4	396	2,741	352	687	2,490	5,267	53,303	52,431	8,133	6,139	493	5,360
Mechanical crushing.....	14	-	68	261	57	104	187	938	2,923	3,571	772	290		
Mechanical screening and sizing only.....	4	1	39	178	39	61	178	224	1,190	1,408	293	6	128	678
Nonproducing establishments....	8	-	22	178	15	31	113	6913	(D)	-	-	(D)	(NA)	(NA)
EAST NORTH CENTRAL DIVISION, TOTAL.....	554	167	20,263	135,595	17,529	34,210	114,906	307,782	180,805	433,097	2105,129	55,490	25,201	283,283
Producing establishments:														
Mines only:														
Strip-pit.....	124	15	1,523	9,863	1,358	2,755	8,618	26,709	15,225	38,357	13,267	3,577	1,807	33,496
Underground.....	163	13	1,594	6,873	1,414	2,418	5,970	10,782	4,587	14,169	6,234	1,200	1,811	(NA)
Strip-pit and auger.....	16	5	239	1,468	217	474	1,359	3,772	2,626	5,213	1,558	1,185	(NA)	(NA)
See footnotes at end of table.														

See footnotes at end of table.

**TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Geographic area and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and machinery installed	Value of shipments and receipts <sup>2</sup>	Net production of coal <sup>2</sup> (1,000 short tons)	Capital expenditures	All employees	Value added in mining
	Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)							
1211.—BITUMINOUS COAL—Continued														
Type of Operation—Continued														
EAST NORTH CENTRAL DIVISION—Continued														
Producing establishments—Con.														
Mines with preparation plants:														
With mechanical cleaning:														
Strip-pit.....	46	44	4,329	34,208	3,833	7,839	30,333	106,263	67,334	144,356	37,918	29,241	4,768	84,943
Underground.....	42	40	7,963	52,052	7,280	13,682	47,259	98,674	39,044	130,621	33,411	7,097	11,456	102,397
With mechanical crushing, screening, or sizing only:														
Strip-pit:														
With crushing.....	58	21	1,273	7,801	1,161	2,533	7,000	22,438	12,039	31,546	8,647	2,931	(NA)	(NA)
With screening or sizing only.....	11	1	115	655	94	199	531	1,441	1,118	2,090	425	469	(NA)	(NA)
Underground:														
With crushing.....	28	6	655	3,471	622	1,113	3,354	5,986	2,503	7,573	1,960	916	705	4,346
With screening or sizing only.....	13	2	169	671	157	278	620	1,027	373	1,345	299	55	(NA)	(NA)
Strip-pit and auger and auger only.....	18	11	577	3,333	530	1,173	3,078	8,375	5,873	12,819	3,714	1,429	544	6,495
Preparation plants only.....	8	2	363	2,431	304	557	1,909	5,399	18,381	23,630	5,575	150	(NA)	(NA)
Nonproducing establishments.....	7	-	29	212	28	55	196	1,553	4,069	-	-	5,622	(NA)	(NA)
Ohio.....	382	80	8,316	50,515	7,090	13,759	41,514	104,869	83,056	166,206	237,821	21,719	9,938	100,122
Producing establishments:														
Mines only:														
Strip-pit.....	90	11	1,164	7,257	1,050	2,111	6,355	17,386	10,348	25,030	8,642	2,704	1,371	22,324
Underground.....	137	9	1,145	4,416	1,046	1,742	3,991	7,422	3,376	9,763	3,863	1,035	931	5,745
Auger.....	13	-	35	173	31	51	160	608	284	816	349	76	54	624
Strip-pit and auger.....	15	5	236	1,456	214	470	1,347	3,751	2,619	5,186	1,549	1,184	323	5,636
Mines with preparation plants:														
With mechanical cleaning:														
Strip-pit.....	8	7	590	3,955	531	1,068	3,528	8,022	14,191	13,068	3,985	9,145	360	6,057
Underground.....	10	10	2,012	13,055	1,762	3,118	11,138	24,295	11,465	33,881	7,741	1,879	3,108	24,987
With mechanical crushing, screening, or sizing only:														
Strip-pit:														
With crushing.....	49	18	1,026	6,037	936	2,111	5,388	16,119	9,386	23,424	6,303	2,081	1,336	14,382
With screening or sizing only.....	6	-	59	351	47	116	271	907	704	1,322	278	289	334	3,108
Underground:														
With crushing.....	14	1	245	1,265	229	401	1,197	2,746	1,278	3,323	860	701	225	981
Strip-pit and auger.....	16	11	573	3,324	526	1,169	2,078	8,339	5,850	12,763	3,691	1,426	(NA)	(NA)
Preparation plants only.....	8	2	363	2,431	304	557	1,909	5,399	18,381	23,630	5,575	150	451	2,119
Indiana.....	69	20	2,959	19,710	2,572	4,763	16,693	45,969	21,666	57,793	215,241	9,842	4,104	44,268
Producing establishments:														
Mines only:														
Strip-pit.....	17	1	135	866	113	247	744	3,284	1,738	4,587	1,308	435	283	8,533
Underground.....	18	1	84	261	77	103	242	464	163	595	166	32	136	(NA)
Mines with preparation plants:														
With mechanical cleaning:														
Strip-pit.....	8	7	857	6,652	735	1,501	5,636	20,809	8,838	26,341	7,181	3,306	1,145	17,757
Underground.....	7	6	1,124	6,656	1,059	1,781	6,110	10,542	4,037	13,415	3,272	1,164	1,834	12,201
With mechanical crushing, screening, or sizing only:														
Strip-pit.....	7	3	218	1,470	195	373	1,316	4,671	1,710	6,058	1,556	323	348	3,583
Illinois.....	103	67	8,988	65,370	7,867	15,688	56,699	156,944	76,083	209,098	252,067	23,929	11,139	138,893
Producing establishments:														
Mines only:														
Strip-pit.....	17	3	224	1,740	195	397	1,519	6,039	3,139	8,740	3,317	438	153	2,639
Underground.....	8	3	365	2,196	291	573	1,737	2,896	1,048	3,811	2,205	133	744	7,172
Mines with preparation plants:														
With mechanical cleaning:														
Strip-pit.....	30	30	2,882	23,601	2,567	5,270	21,169	77,432	44,305	104,947	26,915	16,790	3,263	61,120
Underground.....	25	24	4,827	32,341	4,459	8,783	30,011	63,837	23,542	83,325	22,398	4,054	6,514	65,209
With mechanical crushing, screening, or sizing only:														
Strip-pit.....	7	1	85	598	77	132	556	2,182	1,357	2,832	935	707	244	1,255

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Geographic area and type of operation <sup>1</sup>	1963												1958	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and machinery installed	Value of shipments and receipts <sup>2</sup>	Net production of coal <sup>2</sup> (1,000 short tons)	Capital expenditures (1,000)	All employees	Value added in mining (1,000)
	Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)							
1211.—BITUMINOUS COAL—Continued														
Geographic Area and Selected Types of Operation—Continued														
WEST NORTH CENTRAL.....	85	12	1,675	9,881	907	1,923	5,649	17,927	11,967	22,997	<sup>2</sup> 5,592	6,897	1,877	16,022
Producing establishments:														
Mines only:														
Strip-pit.....	22	1	109	734	99	213	665	2,875	897	3,662	1,006	110	282	2,409
Underground.....	21	-	78	190	72	91	167	485	152	526	123	111		
Mines with preparation plants:														
With mechanical cleaning (strip-pit).....	12	7	528	4,091	482	1,038	3,717	11,432	9,446	14,706	3,309	6,172	(NA)	(NA)
With mechanical crushing, screening, or sizing only:														
Strip-pit.....														
With crushing.....	13	2	147	698	139	351	658	2,150	1,214	2,892	832	472	(NA)	(NA)
With screening or sizing only.....	7	1	57	275	50	110	225	637	173	803	224	7	(NA)	(NA)
Iowa.....	36	3	274	1,246	254	561	1,131	3,350	1,556	4,292	1,226	614	421	3,552
Strip-pit mines with mechanical crushing, screening, or sizing only:														
Strip-pit.....	13	3	174	873	161	400	788	2,430	1,279	3,232	951	475	149	1,893
SOUTH ATLANTIC.....	2,390	445	53,061	296,987	47,904	87,605	259,258	602,800	350,067	893,578	<sup>2</sup> 165,055	59,289	75,925	636,742
Producing establishments:														
Mines only:														
Strip-pit.....	84	10	771	3,605	723	1,356	3,324	9,561	5,679	13,801	3,696	1,439	985	7,281
Underground.....	1,878	204	17,604	66,126	16,279	26,104	60,339	126,833	50,937	162,730	42,279	15,040	20,381	115,269
Auger.....	29	1	161	822	148	266	789	2,566	1,768	3,320	1,146	1,014	(NA)	(NA)
Strip-pit and underground....	7	4	242	1,010	221	437	941	2,486	890	2,931	764	445	(NA)	(NA)
Strip-pit and auger.....	16	3	223	1,406	201	409	1,209	5,614	2,045	6,836	1,693	823	(NA)	(NA)
Other combinations.....	6	3	559	3,192	495	852	2,624	5,281	3,148	7,992	2,532	437	(NA)	(NA)
Mines with preparation plants:														
With mechanical cleaning:														
Underground.....	135	128	23,950	162,013	21,861	42,894	143,418	333,513	146,691	450,968	89,665	29,236	(NA)	(NA)
Strip-pit and underground...	7	7	1,823	12,230	1,768	3,362	11,523	29,866	12,563	41,248	6,772	1,181	(NA)	(NA)
Other combinations.....	13	12	2,579	18,753	2,413	4,791	17,075	40,383	16,481	54,171	12,303	2,692	(NA)	(NA)
With mechanical crushing, screening, or sizing only:														
Strip-pit.....	21	5	281	1,384	245	433	1,131	3,820	2,349	5,802	1,605	367	(NA)	(NA)
Underground:														
With crushing.....	59	35	1,757	8,034	1,601	3,147	7,298	14,009	10,195	20,783	5,059	3,421	(NA)	(NA)
With screening or sizing only.....	23	7	367	1,211	355	592	1,183	1,956	890	2,618	670	228	(NA)	(NA)
Auger.....	6	-	55	337	53	82	325	1,798	244	2,019	559	23	(NA)	(NA)
Strip-pit and underground and strip-pit and auger...	13	10	451	2,492	419	830	2,278	6,318	4,683	10,623	3,024	378	(NA)	(NA)
Other combinations.....	6	4	198	1,127	180	322	1,005	2,598	3,437	5,403	1,410	632	(NA)	(NA)
Preparation plants only:														
Mechanical cleaning.....	34	10	746	4,370	654	1,194	3,705	11,843	69,087	79,822	15,307	1,108	(NA)	(NA)
Mechanical crushing, screening, or sizing only...	39	2	268	1,009	245	460	911	3,660	18,690	21,597	5,195	753	(NA)	(NA)
Maryland.....	64	4	413	1,455	398	671	1,408	3,709	2,063	5,185	1,203	587	540	2,985
Producing establishments:														
Mines only:														
Strip-pit.....	16	1	65	197	60	92	177	944	595	1,215	325	324	76	305
Virginia.....	769	126	11,349	47,858	10,309	17,686	42,580	95,639	68,131	154,963	<sup>2</sup> 29,775	8,807	13,737	100,135
Producing establishments:														
Mines only:														
Strip-pit.....	15	2	140	651	133	291	612	1,454	861	2,105	657	210	194	1,947
Underground.....	663	88	6,706	21,344	6,286	9,941	20,313	37,133	14,508	48,153	13,832	3,488	6,949	31,349
Auger.....	7	-	42	170	38	72	162	535	278	666	216	147	(NA)	(NA)
Strip-pit and auger.....	3	-	34	130	33	64	123	590	137	687	233	40	(NA)	(NA)

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Geographic area and type of operation. <sup>1</sup>	1963												1958	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and machinery installed	Value of shipments and receipts <sup>2</sup>	Net production of coal <sup>2</sup> (1,000 short tons)	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
1211.—BITUMINOUS COAL—Continued														
Geographic Area and Selected Types of Operation—Continued														
SOUTH ATLANTIC—Continued														
Virginia—Continued														
Mines with preparation plants:														
With mechanical cleaning:														
Underground.....	15	13	1,662	9,944	1,538	2,872	8,867	21,161	11,345	30,606	6,614	1,900	3,877	40,211
With mechanical crushing, screening, or sizing only:														
Underground.....	29	12	724	2,999	688	1,341	2,820	5,227	4,246	8,142	1,968	1,331	995	6,596
Preparation plants only:														
Mechanical cleaning.....	12	4	202	1,049	181	371	931	3,509	18,784	21,996	4,629	297	257	4,396
West Virginia.....	1,554	315	41,293	247,663	37,192	69,241	215,260	503,435	279,869	733,409	134,071	49,895	61,634	533,574
Producing establishments:														
Mines only:														
Strip-pit.....	53	7	556	2,757	530	973	2,535	7,163	4,223	10,481	2,714	905	715	5,029
Underground.....	1,175	116	10,724	44,272	9,821	15,892	39,519	88,830	36,241	113,546	28,189	11,525	13,153	82,697
Auger.....	22	1	119	652	110	194	627	2,031	1,490	2,654	930	867	225	2,088
Strip-pit and auger.....	13	3	189	1,276	168	345	1,086	5,024	1,908	6,149	1,460	783	177	3,051
Strip-pit and underground and other combinations....	8	4	628	3,485	547	983	2,855	5,867	3,524	8,783	2,685	608	231	1,084
Mines with preparation plants:														
With mechanical cleaning:														
Underground.....	120	115	22,288	152,069	20,323	40,022	134,551	312,352	135,346	420,362	83,051	27,336	36,506	350,737
Strip-pit and underground	7	7	1,823	12,230	1,768	3,362	11,523	29,866	12,563	41,248	6,772	1,181	2,074	19,954
With mechanical crushing, screening, or sizing only:														
Strip-pit.....	15	4	199	1,033	173	315	825	2,800	1,750	4,268	1,153	282	447	4,125
Underground:														
With crushing.....	37	25	1,144	5,369	1,019	1,978	4,805	9,065	6,236	13,281	3,257	2,020	3,242	21,355
With screening or sizing only.....	12	4	217	752	211	349	732	1,128	525	1,459	384	194	759	4,637
Auger.....	6	-	55	337	53	82	325	1,798	244	2,019	559	23	(NA)	(NA)
Strip-pit and auger.....	10	7	371	2,082	342	684	1,894	4,874	3,236	7,739	2,250	371	609	5,988
Strip-pit and underground and other combinations..	5	4	137	736	126	239	657	1,152	1,723	2,427	636	548	(NA)	(NA)
Preparation plants only:														
Mechanical cleaning.....	22	6	544	3,321	473	823	2,774	8,334	50,303	57,826	10,678	811	495	7,988
Mechanical crushing, screening, or sizing only.	25	2	142	557	124	228	478	1,787	9,516	10,706	2,588	597	(NA)	(NA)
EAST SOUTH CENTRAL, TOTAL....	1,658	280	28,240	139,755	25,662	44,686	123,414	307,202	205,851	475,789	294,510	37,264	38,511	302,832
Producing operations:														
Mines only:														
Strip-pit.....	79	13	848	4,579	756	1,377	4,029	19,347	9,006	26,178	7,551	2,175	883	9,388
Underground.....	1,150	128	9,477	34,328	8,794	14,055	31,964	61,558	22,034	79,349	22,324	4,243	10,997	55,491
Auger.....	34	3	171	712	162	317	692	3,051	2,249	4,466	1,482	834	(NA)	(NA)
Strip-pit and auger.....	15	3	184	994	168	304	860	3,550	1,349	4,494	1,556	405	(NA)	(NA)
Mines with preparation plants:														
With mechanical cleaning:														
Strip-pit.....	24	18	1,342	10,797	1,215	2,649	9,773	43,985	13,611	55,821	16,392	1,775	(NA)	(NA)
Underground.....	53	45	9,166	52,751	8,368	14,789	45,807	101,149	45,724	138,852	25,439	8,021	(NA)	(NA)
Combination.....	7	5	952	5,946	846	1,619	5,246	12,425	11,386	20,312	4,928	3,499	(NA)	(NA)
With mechanical crushing, screening, or sizing only:														
Strip-pit.....	31	7	492	2,445	420	766	2,173	7,658	11,786	9,758	2,554	9,686	613	7,838
Underground:														
With crushing.....	45	23	2,190	10,610	2,047	3,670	9,629	21,106	9,389	26,693	6,975	3,802	5,612	37,304
With screening or sizing only.....	135	10	1,280	3,960	1,168	1,966	3,581	6,510	3,338	9,149	2,448	699		
Auger.....	8	1	75	376	68	104	329	944	737	1,556	490	125	(NA)	(NA)
Strip-pit and auger with mechanical crushing.....	5	3	175	812	165	302	799	4,333	2,934	5,925	1,399	1,342	(NA)	(NA)
Preparation plants only:														
Mechanical cleaning.....	24	9	444	2,408	412	733	2,158	8,262	44,395	52,581	9,978	76	(NA)	(NA)
Mechanical crushing.....	32	5	276	1,506	237	450	1,274	3,245	19,025	21,957	6,033	313	(NA)	(NA)

See footnotes at end of table.



1963 and 1958—Continued

Geographic area and type of operation *	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and machinery installed	Value of shipments and receipts <sup>2</sup>	Net production of coal (1,000 short tons)	Capital expenditures	All employees	Value added in mining
	Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)							
1211.—BITUMINOUS COAL—Continued														
Geographic Area and Selected Types of Operation—Continued														
EAST SOUTH CENTRAL—Continued														
Kentucky.....	1,194	222	20,740	101,309	18,888	33,129	90,534	219,303	163,266	353,149	275,010	29,420	28,397	227,458
Producing operations:														
Mines only:														
Strip-pit.....	29	7	423	2,469	393	745	2,258	13,054	6,146	18,029	5,821	1,171	444	5,228
Underground.....	848	114	8,123	30,165	7,527	12,276	28,013	53,141	19,085	68,535	19,896	3,691	9,241	48,304
Auger and combination.....	47	10	1,181	7,421	1,011	1,904	5,960	13,541	8,133	20,326	5,724	1,348	1,216	14,586
Mines with preparation plants:														
Mines with mechanical cleaning:														
Strip-pit.....	16	12	1,093	9,328	990	2,223	8,447	40,304	11,593	50,507	15,150	1,390	1,113	28,994
Underground.....	35	31	5,881	33,538	5,388	9,527	29,821	56,563	29,832	80,914	17,910	5,481	10,130	83,568
Mines with mechanical crushing, screening, or sizing only:														
Strip-pit.....	17	3	222	1,078	179	356	991	2,845	9,555	3,821	1,216	8,579	224	4,094
Underground:														
With crushing.....	31	16	1,320	5,581	1,228	2,188	5,066	11,234	6,369	14,331	4,267	3,272	2,602	16,106
With screening or sizing only.....	98	8	856	2,442	783	1,297	2,227	4,081	2,309	5,804	1,632	586	1,280	7,196
Preparation plants only:														
Mechanical cleaning.....	19	9	410	2,220	382	677	1,986	7,204	40,670	47,804	9,335	70	371	3,633
Mechanical crushing, screening or sizing only..	34	4	282	1,500	257	495	1,348	4,044	20,957	24,742	6,605	259	274	2,226
Tennessee.....	271	17	1,835	8,044	1,648	2,785	7,080	20,146	10,043	27,015	26,344	3,174	2,661	16,575
Mines only:														
Underground.....	201	5	619	1,794	577	840	1,704	4,050	1,464	5,207	1,433	307	1,247	5,129
Mines with preparation plants:														
With mechanical crushing, screening, or sizing only:														
Strip-pit.....	8	2	162	876	140	260	740	3,232	1,147	3,444	857	935	157	1,736
Underground:														
With crushing.....	10	5	420	2,276	411	704	2,209	4,199	1,217	5,209	1,354	207	835	5,424
With screening or sizing only.....	9	2	238	1,107	215	412	972	1,752	818	2,510	666	60		
Alabama.....	193	41	5,665	30,402	5,126	8,772	25,800	67,753	32,542	95,625	13,156	4,670	7,453	58,799
Mines only:														
Strip-pit only and auger only	23	6	290	1,429	239	398	1,165	3,769	2,022	5,097	934	694	(NA)	(NA)
Underground.....	101	9	735	2,369	690	939	2,247	4,367	1,485	5,607	995	245	509	2,058
Mines with preparation plants:														
With mechanical cleaning.....														
	27	22	3,849	22,653	3,493	6,205	19,073	50,504	22,612	69,979	9,488	3,137	5,465	42,785
With mechanical crushing, screening, or sizing only:														
Underground.....	32	2	636	3,164	578	1,035	2,736	6,350	2,014	7,988	1,503	376	895	8,578
WEST SOUTH CENTRAL.....	40	7	453	2,430	421	773	2,215	5,513	2,688	7,381	1,242	820	1,059	10,618
Producing establishments:														
Mines with preparation plants:														
With mechanical cleaning.....														
With mechanical crushing, screening, and sizing.....	11	5	219	1,287	209	426	1,223	3,630	1,990	5,169	966	451	818	9,130
	3	2	161	916	143	228	774	1,389	436	1,677	198	148		
Arkansas.....	17	1	107	523	105	206	517	1,348	493	1,528	227	313	252	2,081
Mines with preparation plants..														
	6	1	67	364	67	135	364	983	286	1,165	171	104	215	1,929
Oklahoma.....	23	6	346	1,907	316	567	1,698	4,165	2,195	5,853	1,015	507	807	8,537
Producing establishments:														
Mines with preparation plants														
	8	6	313	1,839	285	519	1,633	4,036	2,140	5,681	993	495	603	7,201
See footnotes at end of table.														

1963 and 1958—Continued

Geographic area and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and machinery installed	Value of shipments and receipts <sup>2</sup>	Net pro- duction of coal <sup>2</sup>	Capital expendi- tures	All employees	Value added in mining.
	Total	With 20 em- ployees or more (number)	Total	Payroll	Total	Man- hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 short tons)	(\$1,000)	(number)	(\$1,000)
1211.—BITUMINOUS COAL—Continued														
<u>Geographic Area and Selected Types of Operation—Continued</u>														
MOUNTAIN.....	195	41	3,771	21,548	3,381	5,614	19,036	54,864	30,603	79,177	<sup>2</sup> 13,514	6,290	5,666	48,051
Producing establishments:														
Mines only:														
Strip-pit.....	9	1	64	321	59	94	276	1,103	440	1,425	470	118	(NA)	(NA)
Underground.....	81	1	210	702	195	276	670	1,529	563	1,912	405	180	(NA)	(NA)
Mines with preparation plants:														
With mechanical cleaning (underground).....	14	11	1,215	6,760	1,105	1,689	6,031	15,715	7,163	21,712	3,148	1,166	(NA)	(NA)
With mechanical crushing, screening, and sizing only:														
Underground.....	63	17	1,652	9,809	1,528	2,622	8,955	23,981	7,271	29,434	4,659	1,818	(NA)	(NA)
With mechanical screening and sizing only:														
Underground.....	6	2	109	569	99	177	529	989	155	1,110	205	34	(NA)	(NA)
Wyoming.....	18	6	304	1,485	265	402	1,286	6,185	2,951	8,893	<sup>2</sup> 3,149	243	506	4,244
Producing establishments:														
Mines with preparation plants:														
Mines with mechanical crushing:														
Strip-pit.....	8	4	190	1,065	154	282	892	5,578	2,716	8,061	2,999	233	(NA)	(NA)
Colorado.....	100	16	1,374	8,118	1,242	2,205	7,214	19,470	6,874	24,033	<sup>2</sup> 4,022	2,311	2,016	16,348
Producing establishments:														
Mines only:														
Underground.....	45	-	107	342	101	133	327	841	268	1,039	224	70	(NA)	(NA)
Mines with preparation plants:														
Underground mines with mechanical cleaning plants.	3	3	196	1,340	166	317	1,174	1,802	1,786	2,830	584	758	(NA)	(NA)
With mechanical crushing, screening, and sizing only:														
Strip-pit.....	3	2	90	670	82	168	622	2,137	1,359	2,794	816	702	105	1,238
Underground:														
With crushing.....	40	10	916	5,427	848	1,510	4,906	14,169	3,354	16,813	2,284	710	1,487	11,970
With screening or sizing only.....	3	1	43	198	36	60	158	431	61	463	89	29	187	1,752
Utah.....	36	16	1,726	9,941	1,556	2,502	8,880	23,337	17,654	39,213	<sup>2</sup> 4,322	1,778	2,824	25,376
Producing establishments:														
Mines only:														
Underground.....	8	1	55	259	50	85	245	494	203	602	141	95	(NA)	(NA)
Mines with preparation plants:														
With mechanical cleaning:														
Underground.....	6	5	789	4,375	729	1,116	3,977	11,000	4,835	15,456	2,152	379	(NA)	(NA)
PACIFIC DIVISION.....	19	5	387	3,304	348	736	2,886	6,150	2,203	7,442	1,058	911	533	7,389
Producing establishments:														
Mines with mechanical cleaning:														
Strip-pit.....	4	3	180	2,139	159	424	1,849	4,907	1,542	5,815	845	634	(NA)	(NA)
Washington.....	9	2	4193	41,078	177	291	973	1,141	412	1,548	200	5	276	1,609
Producing establishments:														
Mines with mechanical cleaning	4	2	179	1,024	169	280	953	1,091	401	1,492	192	-	(NA)	(NA)
Alaska.....	10	3	194	2,226	171	445	1,913	5,009	1,791	5,894	<sup>2</sup> 855	906	257	5,780
Producing establishments:														
Mines with mechanical cleaning (strip-pit).....	4	3	180	2,139	159	424	1,849	4,907	1,542	5,815	845	634	237	5,358
See footnotes at end of table.														

TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Geographic area and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and machinery installed	Value of shipments and receipts <sup>2</sup>	Net production of coal <sup>2</sup> (1,000 short tons)	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)		(\$1,000)	(number)	(\$1,000)
1212.—LIGNITE														—
United States, total.....	59	6	512	2,760	441	884	2,245	11,830	6,915	14,112	24,989	4,633	510	9,309
West North Central and West South Central.....	47	6	479	2,615	409	819	2,108	11,300	6,724	13,405	4,676	4,619	483	9,112
West.....	12	—	33	145	32	65	137	530	191	707	313	14	27	197
Type of Operation														
Producing establishments:														
Mines only (strip-pit).....	22	—	58	234	57	125	232	767	346	1,000	326	113	60	517
Mines with mechanical crushing, screening, or sizing only (strip-pit).....	24	6	444	2,490	374	739	1,980	10,995	4,883	12,992	4,649	2,886	433	8,715
1213.—BITUMINOUS COAL MINING SERVICES														
United States.....	131	17	1,304	7,012	1,213	2,337	6,372	16,780	10,073	23,981	( <sup>9</sup> )	2,872	1,520	15,114
Middle Atlantic (Pennsylvania)....	40	5	453	2,518	420	948	2,319	5,142	3,183	7,484	( <sup>9</sup> )	841	565	5,394
East North Central.....	21	3	183	916	176	321	890	2,583	1,055	3,220	( <sup>9</sup> )	418	100	862
Ohio.....	15	3	167	827	160	296	801	2,279	978	2,867	( <sup>9</sup> )	390	98	836
South Atlantic, total.....	38	6	436	2,427	406	708	2,143	5,799	4,288	9,038	( <sup>9</sup> )	1,049	617	5,733
Virginia.....	6	3	176	1,151	160	240	945	2,479	2,593	4,462	( <sup>9</sup> )	610	121	1,531
West Virginia.....	32	3	260	1,276	246	468	1,198	3,320	1,695	4,576	( <sup>9</sup> )	439	476	4,017
East South Central.....	16	2	132	563	125	205	528	1,715	944	2,157	( <sup>9</sup> )	502	173	2,140
Kentucky.....	9	—	45	181	43	79	164	542	314	550	( <sup>9</sup> )	306	115	1,349
Alabama.....	4	2	76	314	72	104	303	990	520	1,346	( <sup>9</sup> )	164	31	546
West.....	9	1	74	467	62	108	381	1,262	484	1,707	( <sup>9</sup> )	39	(NA)	(NA)
Wyoming.....	3	1	60	386	48	82	300	1,092	408	1,492	( <sup>9</sup> )	8	32	447

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>General statistics for some States are not shown separately in this table in order to avoid disclosing figures for individual companies or because of the relatively small size of the statistics. Such States are shown below for 1958, with the number of establishments in each State (and in parentheses the number of employees or employment-size range):

SIC 1211, Bituminous Coal: Massachusetts (100-249 central office employees); New York (50-99 central office employees); Georgia, 3 (6); Montana, 19 (55); New Mexico, 18 (309); Arizona, 4 (3); California (0-4 central office employees).

SIC 1212, Lignite: North Dakota, 43 (342); South Dakota, 1 (0-5); Texas, 3 (100-249); Montana, 11 (20-49); California, 1 (5-9).

SIC 1213, Bituminous Coal Mining Services: Indiana, 3 (10-19); Illinois, 3 (5-9); Iowa, 3 (10-19); Tennessee, 3 (16); Arkansas, 1 (0-4); Oklahoma, 3 (5-9); New Mexico, 3 (5-9); Arizona, 1 (0-4); Washington, 2 (0-4).

<sup>2</sup>For all State totals represents net production of coal (the clean-coal equivalent of all coal mined, based on the location of the mine); for all type of operation statistics represents gross shipments of coal.

<sup>3</sup>In addition, net production in other industries amounted to 201 thousand tons for the United States; with 153 thousand tons in Ohio, and 48 thousand tons in Pennsylvania and Indiana.

<sup>4</sup>Includes data for employees at central offices and related facilities in California.

<sup>5</sup>Includes data for separately reported central offices and related facilities. These were not distributed by type of operation. For 1963, the United States total includes 3,985 such employees with a payroll of \$31,804 thousand.

<sup>6</sup>Includes data for 2 or less lignite operations with less than 10 employees for which data by type of operation could not be segregated from those for bituminous coal operations without disclosing figures for individual companies.

<sup>7</sup>Includes data for production in other industries. The combined tonnage for such production in Pennsylvania and Indiana was 48 thousand tons.

<sup>8</sup>Not shown since the cost of supplies, purchased fuels and electric energy, contract work, and purchased machinery installed exceeds capital expenditures.

<sup>9</sup>Coal mined by the Bituminous Coal Mining Services Industry is included in the production shown for the Bituminous Coal and Lignite Industries.

**TABLE 2B. General Statistics for Selected Counties: 1963 and 1958**

Industry code, industry, division, State, and county	1963												1958	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Net production of coal <sup>1</sup> (1,000 short tons)	Capital expendi- tures (\$1,000)	All employ- ees (number)	Value added in mining (\$1,000)
	Total (number)	With 20 employ- ees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man- hours (1,000)	Wages (\$1,000)							
<b>27.—BITUMINOUS COAL AND LIGNITE MINING, TOTAL</b>	6,305	1,166	133,862	762,263	118,629	217,642	650,955	1,606,688	1,008,071	2,396,419	463,988	218,340	187,963	1,615,744
1411.—Bituminous coal	6,115	1,143	132,046	752,491	116,975	214,421	642,338	1,578,078	991,083	2,358,326	458,999	210,835	185,933	1,591,321
1412.—Lignite	5 <sup>1</sup>	6	512 <sup>2</sup>	2,760	441	884	2,245	11,830	5,915	14,112	4,989	4,633	510	9,399
1413.—Bituminous coal and lignite mining services <sup>3</sup>	131	17	1,304	7,012	1,213	2,337	6,372	16,780	10,073	23,981	( <sup>3</sup> )	2,872	1,520	15,114
<b>27.—BITUMINOUS COAL, TOTAL</b>	1,214	191	34,640	145,509	21,243	39,822	117,293	280,982	210,082	446,349	72,899	44,715	37,726	291,778
Bituminous coal	1,174	186	34,196	142,991	20,823	38,874	114,974	275,840	206,899	438,865	72,899	43,874	37,161	286,384
Bituminous coal mining services <sup>3</sup>	40	5	453	2,518	420	948	2,319	5,142	3,183	7,484	( <sup>3</sup> )	841	565	5,394
<b>Indiana, total</b>	1,214	191	34,640	145,509	21,243	39,822	117,293	280,982	210,082	446,349	72,899	44,715	37,726	291,778
Bituminous coal	1,174	186	34,196	142,991	20,823	38,874	114,974	275,840	206,899	438,865	72,899	43,874	37,161	286,384
Bituminous coal mining services <sup>3</sup>	40	5	453	2,518	420	948	2,319	5,142	3,183	7,484	( <sup>3</sup> )	841	565	5,394
<b>Illinois, total</b>	57	9	2,070	14,838	1,445	2,634	8,793	23,254	23,899	45,378	5,218	1,775	2,957	26,655
Bituminous coal	37	13	1,151	6,195	1,050	1,962	5,507	14,105	6,311	18,702	4,166	1,714	951	8,163
Bituminous coal mining services <sup>3</sup>	81	14	1,115	5,990	1,016	1,892	5,335	13,609	6,118	18,094	4,166	1,633	951	8,163
<b>Missouri, total</b>	19	—	113	604	94	196	490	1,423	1,574	2,715	402	282	103	631
Bituminous coal	55	6	493	2,451	456	961	2,340	5,279	5,761	10,884	2,136	1,060	724	6,472
Bituminous coal mining services <sup>3</sup>	50	5	457	2,250	427	875	2,161	4,713	5,264	9,011	2,136	966	674	6,063
<b>Ohio, total</b>	5	1	36	701	29	86	179	566	497	1,873	( <sup>3</sup> )	94	50	409
Bituminous coal	141	21	3,133	18,812	2,752	4,836	15,566	25,242	26,785	39,601	6,624	12,426	6,745	40,729
Lignite	35	4	368	1,525	330	685	1,365	3,690	2,437	5,204	1,119	923	390	2,715
Lignite mining services <sup>3</sup>	34	12	599	2,862	537	1,401	2,571	8,930	6,303	12,554	3,330	2,684	753	6,895
<b>West Virginia, total</b>	173	29	2,047	9,065	1,909	3,671	8,349	21,572	17,102	35,905	6,798	2,769	2,545	17,411
Bituminous coal	160	28	1,961	8,562	1,811	3,454	7,879	20,387	16,196	34,224	6,798	2,359	2,418	16,366
Bituminous coal mining services <sup>3</sup>	13	1	86	503	98	217	470	1,185	906	1,681	( <sup>3</sup> )	410	127	1,045
<b>Alabama, total</b>	7	2	81	429	72	167	382	1,222	657	1,728	482	151	135	1,602
Lignite	75	3	138	601	131	245	584	1,122	545	1,620	434	47	197	1,438
Lignite mining services <sup>3</sup>	57	4	780	4,849	693	1,250	4,163	9,096	29,180	37,498	1,635	778	2,050	17,327
<b>Arkansas, total</b>	19	8	2,507	21,976	3,166	5,673	18,569	46,201	17,885	57,185	9,536	6,901	5,601	47,378
Bituminous coal	103	20	2,132	12,918	1,835	3,442	10,692	20,882	19,533	37,336	5,647	3,080	3,140	22,215
Bituminous coal mining services <sup>3</sup>	66	9	588	2,688	547	1,059	2,284	5,930	4,687	9,739	2,425	878	792	4,492
<b>California, total</b>	18	3	196	893	181	357	835	2,340	1,799	3,800	840	359	219	3,341
Lignite	13	4	175	1,041	161	366	959	2,412	2,156	4,207	949	361	199	2,760
Lignite mining services <sup>3</sup>	140	16	1,319	6,047	1,212	2,199	5,681	14,965	9,754	21,354	3,805	3,365	1,771	10,703
<b>Colorado, total</b>	9	2	105	510	68	155	332	1,153	1,511	2,344	526	354	64	787
Lignite	10	1	99	536	91	196	463	1,046	1,158	2,066	465	138	140	1,270
Lignite mining services <sup>3</sup>	44	14	3,872	25,297	3,253	6,058	20,287	54,046	23,850	76,730	12,244	1,166	5,439	49,128
Lignite mining services <sup>3</sup>	73	7	1,160	7,097	1,044	1,914	6,093	14,990	5,879	17,913	3,456	2,956	1,936	17,300
<b>NEW YORK GENERAL DIVISION,   TOTAL</b>	575	170	20,446	136,511	17,705	34,531	115,796	310,365	181,860	436,317	105,129	55,908	25,301	284,145
Bituminous coal	554	167	20,263	135,595	17,529	34,210	114,906	307,782	180,805	433,097	105,129	55,490	25,201	283,283
Bituminous coal mining services <sup>3</sup>	21	3	183	916	176	321	890	2,583	1,055	3,220	( <sup>3</sup> )	418	100	862
<b>Idaho, total</b>	297	83	8,483	51,342	7,250	14,055	42,315	107,148	84,034	169,073	37,821	22,109	10,036	100,958
Bituminous coal	382	80	8,316	50,515	7,090	13,755	41,514	104,869	83,056	166,206	37,821	21,719	9,938	100,122
Bituminous coal mining services <sup>3</sup>	15	3	167	827	160	296	801	2,279	978	2,867	( <sup>3</sup> )	390	98	836
<b>Montana, total</b>	31	1	171	626	145	226	526	1,186	1,430	2,567	247	49	274	1,902
Lignite	27	1	153	9,733	1,324	2,447	8,078	22,709	9,102	29,875	7,219	1,936	1,948	19,465
Lignite mining services <sup>3</sup>	10	1	103	562	88	184	476	1,122	629	1,687	415	64	143	849
<b>Nebraska, total</b>	39	3	327	1,697	290	592	1,495	4,699	1,934	6,035	1,493	598	394	3,884
Lignite	17	5	364	2,097	335	674	1,925	6,586	(D)	8,158	1,969	(D)	395	4,168
Lignite mining services <sup>3</sup>	19	2	172	801	164	287	769	1,793	1,688	3,392	700	89	244	1,981
<b>North Dakota, total</b>	8	3	78	311	74	139	293	738	1,152	1,697	355	193	109	675
Lignite	29	11	2,117	14,381	1,766	3,440	11,805	26,028	23,689	46,964	9,374	2,753	42,099	42,176
Lignite mining services <sup>3</sup>	16	1	86	359	81	153	328	1,021	1,311	1,589	323	743	107	806
<b>South Dakota, total</b>	40	14	876	5,181	779	1,511	4,518	11,445	9,204	18,141	3,998	2,508	982	11,584
Lignite	5	2	136	513	129	233	498	1,731	790	1,582	371	939	95	95
Lignite mining services <sup>3</sup>	17	5	306	1,663	269	595	1,434	3,561	3,981	6,836	1,146	706	204	2,331
<b>Texas, total</b>	9	1	123	304	114	196	292	579	507	1,020	305	66	128	671
Lignite	16	1	82	293	70	126	253	398	121	500	126	19	180	1,483
Lignite mining services <sup>3</sup>	9	3	193	1,291	156	324	1,101	3,121	2,416	4,937	1,750	600	135	1,603
<b>Utah, total</b>	18	2	266	2,160	243	495	1,996	5,689	3,237	7,986	2,157	940	461	5,321
Lignite	15	2	147	743	138	298	678	1,598	851	2,146	468	303	275	1,985
Lignite mining services <sup>3</sup>	49	8	628	3,372	569	1,151	2,928	6,206	4,299	8,976	2,323	1,529	754	5,935
<b>Indiana, total</b>	72	20	2,970	19,787	2,583	4,783	16,770	46,234	21,728	58,094	15,241	9,868	4,105	44,289
Bituminous coal	69	20	2,959	19,710	2,572	4,763	16,693	45,969	21,666	57,793	15,241	9,842	4,104	44,268
<b>Warwick, total</b>	14	5	574	3,761	516	969	3,323	14,213	5,873	18,124	5,114	1,962	627	12,035

See footnotes at end of table.

TABLE 2B. General Statistics for Selected Counties: 1963 and 1958—Continued

Industry code, industry, division, State, and county	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Net production of coal <sup>1</sup> (1,000 short tons)	Capital expendi- tures	All employ- ees	Value added in mining
	Total (number)	With 20 employ- ees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man- hours (1,000)	Wages (\$1,000)							
EAST NORTH CENTRAL DIVISION— Continued														
Illinois.....	106	67	8,993	65,382	7,872	15,693	56,711	156,983	76,098	209,150	52,067	23,931	11,140	138,898
Bituminous coal.....	103	67	8,988	65,370	7,867	15,688	56,699	156,944	76,083	209,098	52,067	23,929	11,139	138,893
Peoria <sup>5</sup> .....	6	3	147	1,197	134	286	1,112	3,681	1,850	4,622	945	909	87	1,247
Saline <sup>4</sup> .....	13	7	820	5,752	686	1,370	4,849	13,968	14,080	22,599	4,857	5,449	(NA)	(NA)
Williamson <sup>4</sup> .....	17	14	1,268	8,666	1,193	2,325	8,240	16,103	7,500	21,560	5,678	2,043	1,618	19,512
WEST NORTH CENTRAL DIVISION.....	132	17	2,037	(D)	1,222	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2,201	(D)
Bituminous coal.....	85	12	1,675	9,881	907	1,923	5,649	17,927	11,967	22,997	5,592	6,897	1,877	16,022
Iowa.....	39	3	289	1,308	267	585	1,183	3,470	1,608	4,457	1,226	621	425	3,592
Bituminous coal.....	36	3	274	1,246	254	561	1,131	3,350	1,556	4,292	1,226	614	421	3,552
Mahaska <sup>6</sup> .....	6	1	63	299	60	151	291	815	473	1,138	334	150	(NA)	(NA)
Marion <sup>4</sup> .....	12	2	133	663	123	289	583	1,750	891	2,319	659	324	158	1,890
SOUTH ATLANTIC DIVISION, total..	2,428	451	53,497	299,414	48,310	88,313	261,401	608,599	354,355	902,616	165,055	60,338	76,542	642,475
Bituminous coal.....	2,390	445	53,061	296,987	47,904	87,605	259,258	602,800	350,067	893,578	165,055	59,289	75,925	636,742
Bituminous coal mining services <sup>2</sup> .....	38	6	436	2,427	406	708	2,143	5,799	4,288	9,038	( <sup>3</sup> )	1,049	617	5,733
Maryland <sup>5</sup> .....	64	4	413	1,455	398	671	1,408	3,709	2,063	5,185	1,203	587	560	3,170
Allegany.....	41	-	122	431	120	204	424	928	944	1,812	241	60	211	1,480
Garrett.....	23	4	291	1,024	278	467	984	2,781	1,119	3,373	962	527	349	1,690
Virginia.....	775	129	11,525	49,009	10,469	17,926	43,525	98,118	70,724	159,425	29,775	9,417	13,858	101,666
Bituminous coal.....	769	126	11,349	47,858	10,309	17,686	42,580	95,639	68,131	154,963	29,775	8,807	13,737	100,135
Bituminous coal mining services <sup>2</sup> .....	6	3	176	1,151	160	240	945	2,479	2,593	4,462	( <sup>3</sup> )	610	121	1,531
Buchanan <sup>6</sup> .....	401	66	5,326	19,609	4,997	8,225	18,291	40,159	29,830	66,207	11,872	3,782	4,614	43,475
Dickenson <sup>6</sup> .....	86	15	2,050	11,093	1,877	3,489	9,946	24,497	8,951	32,071	8,060	1,377	1,831	25,258
Wise <sup>7</sup> .....	152	26	1,967	8,431	1,847	3,226	7,988	18,561	22,451	38,353	6,033	2,659	3,059	21,342
West Virginia, total.....	1,586	318	41,553	248,939	37,438	69,709	216,458	506,755	281,564	737,985	134,071	50,334	62,110	537,591
Bituminous coal.....	1,554	315	41,293	247,663	37,192	69,241	215,260	503,435	279,869	733,409	134,071	49,895	61,634	533,574
Bituminous coal mining services <sup>2</sup> .....	32	3	260	1,276	246	468	1,198	3,320	1,695	4,576	( <sup>3</sup> )	439	476	4,017
Barbour <sup>4</sup> .....	42	8	829	4,199	745	1,322	3,602	8,411	4,999	12,875	2,696	535	1,083	10,342
Boone <sup>5</sup> .....	53	9	1,749	10,956	1,642	3,024	10,294	23,956	10,675	32,077	6,571	2,534	2,441	21,154
Brooke <sup>5</sup> .....	12	6	287	1,459	239	432	1,201	2,757	1,758	4,222	887	293	470	2,892
Fayette <sup>4</sup> .....	169	20	2,440	13,164	2,177	7,435	11,489	24,170	16,553	37,532	6,063	2,185	3,631	28,150
Gilmer <sup>4</sup> .....	14	3	326	1,879	310	590	1,775	3,206	2,696	5,301	977	600	183	1,774
Greenbrier <sup>4</sup> .....	73	6	483	1,621	431	687	1,426	3,036	2,562	5,333	886	259	776	5,052
Harrison <sup>4</sup> .....	98	23	1,937	10,396	1,714	3,066	8,775	23,811	12,851	33,644	7,579	3,018	2,566	23,879
Kanawha <sup>6</sup> .....	115	24	3,220	19,628	2,866	5,205	17,060	39,577	27,187	61,462	12,210	5,302	4,070	43,995
Logan <sup>4</sup> .....	50	24	4,740	34,168	4,086	7,947	28,050	59,848	28,012	82,275	17,643	5,585	8,050	66,298
McDowell <sup>4</sup> .....	200	33	5,596	34,904	5,071	9,442	29,809	77,588	58,548	131,915	15,862	4,221	9,230	89,521
Marion <sup>4</sup> .....	25	8	2,303	16,074	1,951	3,603	12,935	37,799	14,030	48,049	9,192	3,780	3,709	43,806
Mercer <sup>4</sup> .....	37	6	499	2,674	477	857	2,537	5,671	4,238	9,611	1,432	298	829	4,437
Mingo <sup>5</sup> .....	74	14	1,512	9,138	1,394	2,593	8,189	17,557	8,335	24,532	4,831	1,360	2,451	24,316
Nicholas <sup>5</sup> .....	86	22	2,404	13,007	2,266	4,278	11,736	25,512	14,981	34,287	6,550	6,206	2,956	22,150
Preston <sup>4</sup> .....	101	18	1,449	5,374	1,380	2,409	5,148	11,061	6,485	15,786	3,659	1,760	1,495	6,876
Raleigh <sup>4</sup> .....	122	26	3,034	17,903	2,766	5,198	16,283	33,129	13,461	43,995	7,735	2,595	5,639	41,193
Randolph <sup>5</sup> .....	32	9	544	2,157	512	932	2,035	3,933	1,454	5,078	1,074	309	713	4,007
Taylor <sup>4</sup> .....	24	1	142	359	130	187	325	657	299	871	250	85	135	756
Upshur <sup>5</sup> .....	21	4	317	1,548	297	553	1,479	2,849	1,007	3,672	844	184	569	3,966
Webster <sup>5</sup> .....	28	8	369	1,716	354	564	1,484	3,467	2,165	5,146	961	486	592	3,431
Wyoming <sup>4</sup> .....	64	19	3,882	24,280	3,660	6,932	22,492	50,116	22,963	66,937	12,157	6,142	4,870	49,276
EAST SOUTH CENTRAL DIVISION, TOTAL.....	1,674	282	28,372	140,318	25,787	44,891	123,942	308,917	206,795	477,946	94,510	37,766	38,684	304,972
Bituminous coal.....	1,658	280	28,240	139,755	25,662	44,686	123,414	307,202	205,851	475,789	94,510	37,264	38,511	302,832
Bituminous coal mining services <sup>2</sup> .....	16	2	132	563	125	205	528	1,715	944	2,157	( <sup>3</sup> )	502	173	2,140
Kentucky.....	1,203	222	20,785	101,490	18,931	33,208	90,698	219,845	163,580	353,699	75,010	29,726	28,512	228,807
Bituminous coal.....	1,194	222	20,740	101,309	18,888	33,129	90,534	219,303	163,266	353,149	75,010	29,420	28,397	227,458
Bituminous coal mining services <sup>2</sup> .....	9	-	45	181	43	79	164	542	314	550	( <sup>3</sup> )	306	115	1,349
Bell <sup>6</sup> .....	84	7	539	1,882	508	840	1,802	5,867	5,593	10,999	2,155	461	699	5,281
Clay <sup>5</sup> .....	37	21	1,162	3,236	1,083	1,831	2,960	5,312	6,960	11,709	1,864	563	1,130	4,707
Floyd <sup>5</sup> .....	155	20	2,406	12,307	2,253	4,001	11,583	23,517	23,597	46,316	5,344	798	3,047	22,577
Harlan <sup>6</sup> .....	106	26	2,611	12,982	2,314	4,102	10,681	20,237	10,686	29,496	6,071	1,427	4,055	43,567
Hopkins <sup>4</sup> .....	41	19	2,557	14,155	2,250	3,923	12,222	31,312	10,675	40,857	11,964	1,130	3,390	34,716
Johnson <sup>5</sup> .....	37	2	177	490	145	194	409	995	478	1,424	334	49	256	1,112
Knott <sup>5</sup> .....	42	6	394	1,222	361	574	1,126	2,593	971	2,424	249	43	230	1,112

TABLE 2B. General Statistics for Selected Counties: 1963 and 1958—Continued

Industry code, industry, division, State, and county	1963												1958	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Net pro- duction of coal <sup>1</sup> (1,000 short tons)	Capital expendi- tures	All employ- ees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man- hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)							
EAST SOUTH CENTRAL DIVISION— Continued														
Tennessee.....	274	17	1,846	8,112	1,658	2,807	7,141	20,329	10,153	27,276	6,344	3,206	2,688	16,820
Bituminous coal.....	271	17	1,835	8,044	1,648	2,785	7,080	20,146	10,043	27,015	6,344	3,174	2,661	16,575
Campbell <sup>4</sup> .....	56	7	446	1,748	420	744	1,645	6,408	4,065	8,934	1,955	1,539	355	1,704
Claiborne <sup>4</sup> .....	25	2	174	571	158	247	539	1,401	1,027	2,330	453	98	165	995
Grundy <sup>5</sup> .....	6	1	58	419	36	83	260	1,309	938	1,736	218	511	316	1,708
Scott <sup>5</sup> .....	29	1	147	576	140	234	546	1,443	580	1,865	454	158	302	1,858
Alabama, total.....	197	42	5,741	30,716	5,198	8,876	26,103	68,743	33,062	96,971	13,156	4,834	7,484	59,345
Bituminous coal.....	193	41	5,665	30,402	5,126	8,772	25,800	67,753	32,542	95,625	13,156	4,670	7,453	58,799
Bituminous coal mining services.....	4	1	76	314	72	104	303	990	520	1,346	( <sup>3</sup> )	164	31	546
Jefferson <sup>4</sup> .....	76	14	3,489	19,880	3,129	5,429	16,274	38,049	18,419	53,707	7,160	2,761	5,092	37,179
Marion <sup>5</sup> .....	34	6	358	1,331	316	485	1,138	2,173	936	2,871	558	238	418	2,028
Tuscaloosa <sup>5</sup> .....	9	3	119	521	114	170	498	1,415	453	1,750	366	118	220	2,598
Walker.....	53	12	1,338	6,958	1,244	2,131	6,445	21,379	11,102	31,212	4,025	1,268	1,355	15,838
Bituminous coal.....	44	11	1,261	6,588	1,170	2,016	6,089	20,214	10,449	29,597	4,025	1,066	1,355	15,838
Bituminous coal mining services.....	9	1	77	370	74	115	356	1,165	653	1,615	-	202		
WEST SOUTH CENTRAL DIVISION.....	47	8	596	(D)	539	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1,241	(D)
Bituminous coal.....	40	7	453	2,430	421	773	2,215	5,513	2,688	7,381	1,242	820	1,059	10,618
Arkansas:														
Bituminous coal.....	17	1	107	523	105	206	517	1,348	493	1,528	227	313	252	2,081
Johnson <sup>6</sup> .....	6	-	60	305	60	119	305	794	265	770	112	289	104	1,104
Oklahoma <sup>4</sup> .....	23	6	346	1,907	316	567	1,698	4,165	2,195	5,853	1,015	507	807	8,537
Craig <sup>4</sup> .....	9	2	92	434	88	191	417	874	539	1,289	319	124	(NA)	(NA)
MOUNTAIN DIVISION.....	213	42	3,870	22,115	3,467	5,771	19,509	56,590	31,204	81,455	(D)	6,339	5,735	48,791
Bituminous coal.....	195	41	3,771	21,548	3,381	5,614	19,036	54,864	30,603	79,177	13,514	6,290	5,666	48,051
Wyoming, total.....	21	7	364	1,871	313	484	1,586	7,277	3,359	10,385	3,149	251	538	4,691
Bituminous coal.....	18	6	304	1,485	265	402	1,286	6,185	2,951	8,893	3,149	243	506	4,244
Bituminous coal mining services.....	3	1	60	386	48	82	300	1,092	408	1,492	( <sup>3</sup> )	8	32	447
Carbon <sup>4</sup> .....	5	1	62	411	57	116	386	1,360	283	1,617	481	26	(NA)	(NA)
Colorado <sup>5</sup> .....	100	16	1,374	8,118	1,242	2,205	7,214	19,470	6,874	24,033	4,022	2,311	2,016	16,348
Fremont <sup>5</sup> .....	21	1	91	405	80	134	357	1,021	361	1,251	314	131	96	739
Gunnison <sup>5</sup> .....	10	2	161	854	155	256	822	1,116	428	1,116	157	137	(NA)	(NA)
Weld <sup>5</sup> .....	6	5	222	1,337	214	382	1,303	3,319	578	3,704	721	193	209	2,391
Utah <sup>5</sup> .....	36	16	1,726	9,941	1,556	2,502	8,880	23,337	17,654	39,213	4,322	1,778	2,830	25,417
Carbon <sup>4</sup> .....	18	13	1,304	7,561	1,202	1,910	6,865	18,811	16,377	33,851	3,410	1,337	2,130	16,724
Emery <sup>5</sup> .....	10	2	296	1,681	277	451	1,610	3,719	1,107	4,641	783	185	(NA)	(NA)
PACIFIC DIVISION.....	22	5	395	3,349	356	752	2,931	6,216	2,277	7,578	(D)	915	533	7,389
Bituminous coal.....	19	5	387	3,304	348	736	2,886	6,150	2,203	7,442	1,058	911	533	7,389
Alaska <sup>6</sup> .....	10	3	194	2,226	171	445	1,913	5,009	1,791	5,894	858	906	257	5,780

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>Represents the clean-coal equivalent of all coal mined, based on the location of the mine. Includes small tonnages of coal produced in other industries.<sup>2</sup>Service companies were permitted to prepare one report for all mining services performed. The totals shown for number of establishments in this table, and all figures shown for number of establishments in other tables of this report, are the counts of these reports. The Division and State total figures for all other items are based on the classification of these reports by the principal State in which services were performed. However, these reports contained data for the total receipts for services, total employment, tonnage of raw coal mined, and capital expenditures by county. All other county information for this industry was obtained by allocating the totals reported for each establishment on the basis of the reported county data. The number of establishments shown by county represents the number of operations in separate counties.<sup>3</sup>Coal mined by the Bituminous Coal Mining Services Industry is included in the production shown for the Bituminous Coal and Lignite Industries.<sup>4</sup>Represents establishments in the Bituminous Coal and the Bituminous Coal Mining Services Industries.<sup>5</sup>Represents the Bituminous Coal Industry only. No establishments in the Bituminous Coal Mining Services Industry were reported in the county.<sup>6</sup>Excludes the Bituminous Coal Mining Services Industry.

TABLE 3A. Detailed Statistics, by Geographic Areas: 1963

Item	12.—Bituminous coal and lignite mining industries, total	1211.—Bituminous coal industry						
		United States, total	Middle Atlantic (Pennsylvania)	East North Central				West North Central
				Division, total	Ohio	Indiana	Illinois	
Establishments, total.....number..	6,305	6,115	1,174	554	382	69	103	85
With 0 to 19 employees.....do....	5,139	4,972	988	387	302	49	36	73
With 20 to 99 employees.....do....	874	851	142	109	64	9	36	10
With 100 employees and over.....do....	292	292	44	58	16	11	31	2
Including mines and dredges.....do....	5,999	5,941	1,144	546	374	69	103	85
Including preparation plants.....do....	1,408	1,382	267	236	125	34	77	42
Net production of coal, total.....1,000 short tons..	463,988	458,999	72,899	105,129	37,821	15,241	52,067	5,592
From underground operations.....do....	305,393	305,379	47,274	40,304	11,455	4,321	24,528	220
From strip-pit operations.....do....	147,137	142,162	24,480	63,166	24,710	10,920	27,536	5,372
From auger and dredge operations.....do....	11,458	11,458	1,145	1,659	1,656	-	3	-
Net shipments of coal, total.....do....	464,285	459,301	171,886	1105,773	38,312	15,216	52,245	5,595
Raw coal sold for use without preparation.....do....	65,783	65,418	110,315	110,209	7,837	11,545	827	1,152
Prepared coal.....do....	398,502	393,883	61,571	95,564	30,475	13,671	51,418	4,443
Value of shipments and receipts, total.....\$1,000..	2,396,419	2,358,326	438,865	433,097	166,206	57,793	209,098	22,997
Raw coal transferred to other establishments for preparation and coal resales.....do....	295,698	295,161	75,404	31,551	20,772	43	10,736	29
Net shipments and receipts, total.....do....	2,100,721	2,063,165	363,461	401,546	145,434	57,750	198,362	22,908
Coal net shipments.....do....	2,072,686	2,059,046	363,461	401,546	144,455	57,750	198,362	22,959
Other products and services.....do....	28,035	4,119	979	979	979	-	-	9
Value added in mining.....do....	1,606,688	1,578,078	275,840	307,782	104,869	45,969	156,944	17,927
Persons in industry, total.....number..	138,450	136,458	24,918	20,564	8,543	2,994	9,027	1,751
Production, development, and exploration workers, average for the year.....do....	118,629	116,975	20,823	17,529	7,090	2,572	7,867	907
January.....do....	118,705	117,073	20,782	17,715	7,041	2,662	8,012	1,066
February.....do....	120,101	118,447	20,877	17,678	7,114	2,732	7,832	1,056
March.....do....	118,952	117,330	21,053	17,780	7,100	2,760	7,920	1,014
April.....do....	117,715	116,115	20,907	17,438	7,113	2,575	7,750	876
May.....do....	117,676	116,039	21,183	17,521	7,153	2,522	7,846	812
June.....do....	117,539	115,883	20,983	17,410	7,154	2,480	7,776	835
July.....do....	116,588	114,958	20,336	17,328	7,100	2,412	7,816	836
August.....do....	117,324	115,689	20,314	17,301	6,942	2,602	7,757	859
September.....do....	118,906	117,256	21,187	17,303	6,923	2,413	7,967	923
October.....do....	120,591	118,926	20,454	17,351	7,019	2,404	7,928	971
November.....do....	120,580	118,846	20,744	17,516	7,165	2,405	7,946	944
December.....do....	120,675	120,000	21,233	17,790	7,168	2,504	8,118	937
Other employees.....do....	15,233	15,071	3,133	2,734	1,226	387	1,121	768
Proprietors and firm members.....do....	4,588	4,412	962	301	227	35	39	76
Performing manual labor.....do....	3,774	3,620	821	248	191	29	28	61
Man-hours worked by production, development, and exploration workers, total.....1,000..	217,642	214,421	38,874	34,210	13,759	4,763	15,688	1,923
At mines, total.....do....	196,587	193,555	35,009	30,022	12,118	4,175	13,729	1,628
Underground.....do....	145,102	144,694	23,845	14,683	4,988	2,015	7,680	1,177
Strip-pits, auger mines, and dredges.....do....	30,995	28,869	8,168	9,905	5,487	1,305	3,113	1,246
Surface (including mine shops and yards).....do....	20,490	19,992	2,996	5,434	1,643	855	2,936	205
At preparation plants.....do....	21,055	20,866	3,865	4,188	1,641	588	1,959	295
Man-hours spent on development and exploration work (included above).....do....	3,008	2,592	562	260	170	1	89	21
Principal expenses designated below, total....\$1,000..	1,572,474	1,552,769	311,058	263,405	114,623	30,960	117,822	14,010
Wages of production, development, and exploration workers.....do....	650,955	642,338	114,974	114,906	41,514	16,693	56,699	5,649
Salaries of all other employees.....do....	111,308	110,153	25,460	20,689	9,001	3,017	8,671	4,232
Supplies.....do....	369,986	369,986	63,189	70,199	30,834	8,273	31,092	2,553
Raw coal received for preparation.....do....	285,563	285,563	68,156	32,731	21,544	-	11,187	-
Coal received for resale without further processing.....do....	10,475	10,123	2,139	968	887	43	38	14
Purchased fuel.....do....	21,330	19,804	5,404	5,278	3,320	537	1,421	460
Purchased electric energy.....do....	56,724	56,354	10,360	11,887	2,723	1,816	7,348	945
Contract work.....do....	66,133	64,742	21,376	6,747	4,800	581	1,366	157
Purchased machinery installed.....do....	197,860	190,805	36,375	52,995	18,948	10,416	23,631	7,838
Capital expenditures, total.....do....	218,340	210,835	43,874	55,490	21,719	9,842	23,929	6,897
Development and exploration of mineral property.....do....	7,213	7,302	1,201	1,410	804	137	469	50
Preparation plants and other construction.....do....	38,444	38,055	9,344	7,345	3,019	2,012	2,314	59
New machinery and equipment.....do....	152,236	145,668	26,953	42,326	16,428	7,264	18,634	6,551
Used plant and equipment.....do....	20,348	19,810	6,376	4,409	1,468	429	2,512	237
Energy used.....million kwh. equivalent..	16,071	15,598	2,625	3,273	1,575	573	1,125	199
Coal produced and used at same establishment.....1,000 short tons..	633	627	38	120	52	38	30	1
Fuels purchased:								
Coal.....do....	73	73	4	4	4	-	(2)	-
Distillate fuel oil.....1,000 barrels..	1,993	1,827	506	620	382	64	174	52
Residual fuel oil.....do....	223	217	80	36	23	2	11	4
Gas.....million cu. ft..	982	972	425	78	70	-	8	-
Gasoline.....1,000 gallons..	23,612	22,211	5,387	6,037	3,705	566	1,766	549
Other fuels.....\$1,000..	1,063	1,014	154	230	189	37	4	2
Undistributed.....do....	1,598	1,456	435	57	38	-	19	64
Electric energy purchased.....million kwh..	5,014	4,997	821	883	239	139	505	59
Electric energy generated and used.....do....	47	47	3	22	1	10	11	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	6,301	6,070	1,164	1,435	704	196	535	87
Per production worker.....hp..	53	52	56	82	99	76	68	96
Prime movers.....1,000 hp..	2,575	2,382	487	757	480	80	197	53
Electric motors driven by purchased energy.....do....	3,726	3,688	677	678	224	116	338	34
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	55	55	5	9	3	4	2	(2)

See footnotes at end of table.



TABLE 3A. Detailed Statistics, by Geographic Areas: 1963—Continued

Item	1211.—Bituminous coal industry—Continued									
	South Atlantic				East South Central				West South Central	
	Division, total	Maryland	Virginia	West Virginia	Division, total	Kentucky	Tennessee	Alabama	Division, total	Oklahoma
Establishments, total.....number..	2,390	64	769	1,554	1,658	1,194	271	193	40	23
With 0 to 19 employees.....do....	1,945	60	643	1,239	1,378	972	254	152	33	17
With 20 to 99 employees.....do....	322	4	116	202	224	180	14	30	6	5
With 100 employees and over.....do....	123	-	10	113	56	42	3	11	1	1
Including mines and dredges.....do....	2,317	63	744	1,507	1,596	1,141	265	190	40	23
Including preparation plants.....do....	370	9	77	283	376	270	37	69	15	9
Net production of coal, total.....1,000 short tons..	165,055	1,203	29,775	134,071	94,510	75,010	6,344	13,156	1,242	1,015
From underground operations.....do....	149,144	450	26,836	121,852	60,121	46,441	3,444	10,236	133	57
From strip-pit operations.....do....	10,627	753	2,122	7,752	31,019	25,583	2,656	2,780	1,109	958
From auger and dredge operations.....do....	5,284	-	817	4,467	3,370	2,986	244	140	-	-
Net shipments of coal, total.....do....	164,232	1,196	30,816	132,213	96,049	76,457	6,413	13,179	1,241	1,013
Raw coal sold for use without preparation.....do....	23,560	730	7,765	15,063	19,197	16,008	2,004	1,185	90	34
Prepared coal.....do....	140,672	466	23,051	117,150	76,852	60,449	4,409	11,994	1,151	979
Value of shipments and receipts, total.....\$1,000..	893,578	5,185	154,963	733,409	475,789	353,149	27,015	95,625	7,381	5,853
Raw coal transferred to other establishments for preparation and coal resales.....do....	114,511	495	25,365	88,651	475,789	353,149	27,015	3,614	-	-
Net shipments and receipts, total.....do....	779,067	4,690	129,598	644,758				92,011	7,381	5,853
Coal net shipments.....do....	778,470	4,617	129,289	644,543				91,137	7,306	5,778
Other products and services.....do....	597	73	309	215				874	75	75
Value added in mining.....do....	602,800	3,709	95,639	503,435	307,202	219,303	20,146	67,753	5,513	4,165
Persons in industry, total.....number..	54,782	461	12,060	42,252	29,380	21,517	2,078	5,785	489	367
Production, development, and exploration workers, average for the year.....do....	47,904	398	10,309	37,192	25,662	18,888	1,648	5,126	421	316
January.....do....	47,113	403	10,241	36,463	25,732	18,908	1,704	5,120	515	383
February.....do....	48,519	394	10,272	37,847	25,615	18,866	1,647	5,102	512	379
March.....do....	47,300	406	10,291	36,597	25,741	18,962	1,567	5,212	511	407
April.....do....	47,522	375	10,111	37,030	25,239	18,480	1,556	5,203	503	410
May.....do....	47,120	395	10,139	36,581	25,322	18,488	1,659	5,175	491	401
June.....do....	47,507	368	9,970	37,164	25,268	18,427	1,638	5,203	488	396
July.....do....	48,001	360	10,175	37,461	24,999	18,702	1,557	4,740	458	365
August.....do....	47,988	393	10,128	37,463	25,409	18,730	1,624	5,055	305	211
September.....do....	48,177	373	10,238	37,562	25,648	19,034	1,649	4,965	349	222
October.....do....	49,136	374	10,616	38,140	26,345	19,514	1,712	5,119	358	225
November.....do....	49,207	395	10,679	38,127	26,176	19,372	1,742	5,062	377	245
December.....do....	49,413	380	10,674	38,353	26,330	19,475	1,759	5,096	379	246
Other employees.....do....	5,157	15	1,040	4,101	2,578	1,852	187	539	32	30
Proprietors and firm members.....do....	1,721	48	711	959	1,140	777	243	120	36	21
Performing manual labor.....do....	1,408	35	541	829	898	561	238	99	31	20
Man-hours worked by production, development, and exploration workers, total.....1,000..	87,605	671	17,686	69,241	44,686	33,129	2,785	8,772	773	567
At mines, total.....do....	80,045	609	16,395	63,034	40,489	29,710	2,643	8,136	702	498
Underground.....do....	69,807	354	15,079	54,368	32,124	24,008	1,855	6,261	721	128
Strip-pits, auger mines, and dredges.....do....	3,516	229	542	2,745	4,813	3,217	707	889	397	296
Surface (including mine shops and yards).....do....	6,722	26	774	5,921	3,552	2,485	81	986	84	74
At preparation plants.....do....	7,560	62	1,291	6,207	4,197	3,419	142	636	71	69
Man-hours spent on development and exploration work (included above).....do....	964	1	308	655	652	482	8	162	1	-
Principal expenses designated below, total.....\$1,000..	600,431	3,054	109,840	487,522	304,129	229,635	15,719	58,775	4,384	3,529
Wages of production, development, and exploration workers.....do....	259,258	1,408	42,580	215,260	123,414	90,534	7,080	25,800	2,215	1,698
Salaries of all other employees.....do....	37,729	47	5,278	32,403	16,341	10,775	964	4,602	215	209
Supplies.....do....	145,479	1,240	51,860	124,359	69,767	47,624	3,864	18,279	1,231	1,026
Raw coal received for preparation.....do....	107,652				66,385	59,946	1,917	4,677	-	-
Coal received for resale without further processing.....do....	4,714				2,218	2,063				
Purchased fuel.....do....	4,095				3,696	2,342				
Purchased electric energy.....do....	20,514				10,475	7,986				
Contract work.....do....	20,990	93	6,304	14,593	11,833	8,365	855	2,613	291	247
Purchased machinery installed.....do....	46,623	464	6,149	40,010	41,477	34,940	2,368	4,169	734	573
Capital expenditures, total.....do....	59,289	587	8,807	49,895	37,264	29,420	3,174	4,670	820	507
Development and exploration of mineral property.....do....	2,477	26	352	2,099	1,306	788	166	352	45	37
Preparation plants and other construction.....do....	12,296	68	1,969	10,259	7,514	6,677	377	460	117	31
New machinery and equipment.....do....	40,580	455	5,494	34,631	24,715	19,669	2,062	2,984	459	266
Used plant and equipment.....do....	3,936	38	992	2,906	3,729	2,286	569	874	199	173
Energy used.....million kwh. equivalent..	6,143	54	2,225	3,864	2,818	2,196	222	400	63	48
Coal produced and used at same establishment.....1,000 short tons..	376	(2)	238	138	67	65	-	2	-	-
Fuels purchased:										
Coal.....do....	61	-	(2)	61	3	2	(2)	1	-	-
Distillate fuel oil.....1,000 barrels..	301	15	38	248	279	191	37	51	13	9
Residual fuel oil.....do....	59	-	13	46	30	27	3	-	-	-
Gas.....million cu. ft..	324	-	-	324	135	54	-	81	-	-
Gasoline.....1,000 gallons..	5,313	250	629	4,434	3,997	2,829	347	821	245	207
Other fuels.....\$1,000..	198	11	51	136	394	139	139	116	6	-
Undistributed.....do....	298	51	81	166	483	306	124	53	62	42
Electric energy purchased.....million kwh..	1,752	4	254	1,494	1,349	1,078	77	194	15	15
Electric energy generated and used.....do....	6	-	-	6	1	(2)	1	-	(2)	(2)
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	1,881	25	366	1,490	1,229	920	61	248	49	46
Per production worker.....hp..	39	63	36	40	48	49	37	48	116	146
Prime movers.....1,000 hp..	560	19	136	405	406	274	34	98	31	29
Electric motors driven by purchased energy energy.....do....	1,321	6	230	1,085	823	646	27	150	18	17
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	17	(2)	3	14	19	1	2	16	1	1

See footnotes at end of table.



TABLE 3A. Detailed Statistics, by Geographic Areas: 1963—Continued

Item	1211.—Bituminous coal industry—Continued						1212.— Lignite industry	1213.—Bituminous coal mining services		
	Mountain				Pacific			United States	Middle Atlantic (Pennsylvania)	South Atlantic
	Division, total	Wyoming	Colorado	Utah	Division, total	Alaska				
Establishments, total.....number..	195	18	100	36	19	10	59	131	40	38
With 0 to 19 employees.....do....	154	12	84	20	14	7	53	114	35	32
With 20 to 99 employees.....do....	34	6	15	12	4	3	6	17	5	6
With 100 employees and over.....do....	7	-	1	4	1	-	-	-	-	-
Including mines and dredges.....do....	193	18	100	35	19	10	58	(X)	(X)	(X)
Including preparation plants.....do....	108	12	62	28	8	4	26	(X)	(X)	(X)
Net production of coal, total.....1,000 short tons..	13,514	3,149	4,022	4,322	1,058	858	4,989	(2)	(2)	(2)
From underground operations.....do....	7,993	120	3,184	4,322	190	-	14	(2)	(2)	(2)
From strip-pit operations.....do....	5,521	3,029	838	-	868	858	4,975	(2)	(2)	(2)
From auger and dredge operations.....do....	-	-	-	-	-	-	-	(2)	(2)	(2)
Net shipments of coal, total.....do....	13,518	3,149	3,972	4,379	1,055	856	4,984	(2)	(2)	(2)
Raw coal sold for use without preparation.....do....	924	277	134	19	134	856	365	(2)	(2)	(2)
Prepared coal.....do....	12,594	3,149	3,695	4,245	1,036	-	4,619	(2)	(2)	(2)
Value of shipments and receipts, total.....\$1,000..	79,177	8,893	24,033	39,213	7,442	5,894	14,112	23,981	7,484	9,038
Raw coal transferred to other establishments for preparation and coal resales.....do....	79,177	-	24,033	39,213	-	-	131	406	-	-
Net shipments and receipts, total.....do....	69,916	8,893	23,513	30,473	7,400	5,894	13,981	23,575	7,484	9,038
Coal net shipments.....do....	(D)	-	(D)	(D)	42	-	341	23,575	(D)	(D)
Other products and services.....do....	54,864	6,185	19,470	23,337	6,150	5,009	11,830	16,780	5,142	5,799
Value added in mining.....do....	3,928	314	1,474	1,749	406	201	557	1,435	495	461
Persons in industry, total.....number..	3,801	265	1,242	1,556	348	171	441	1,213	420	406
Production, development, and exploration workers, average for the year.....do....	3,801	293	1,360	1,829	349	154	481	1,151	435	346
January.....do....	3,793	289	1,374	1,822	397	167	476	1,178	445	360
February.....do....	3,555	276	1,311	1,675	376	170	469	1,153	426	361
March.....do....	3,268	264	1,227	1,494	362	167	427	1,173	429	377
April.....do....	3,229	251	1,240	1,457	361	157	431	1,208	421	401
May.....do....	3,091	203	1,168	1,432	301	165	410	1,246	410	452
June.....do....	2,981	198	1,017	1,454	319	182	401	1,229	406	447
July.....do....	3,174	242	1,105	1,495	339	184	402	1,233	413	435
August.....do....	3,369	261	1,184	1,567	300	172	413	1,237	415	434
September.....do....	3,506	273	1,288	1,582	305	175	434	1,231	407	510
October.....do....	3,566	291	1,312	1,597	316	172	465	1,269	425	432
November.....do....	3,627	303	1,357	1,607	291	163	463	1,212	400	409
December.....do....	390	39	132	170	39	23	71	91	33	30
Other employees.....do....	157	10	100	23	19	7	45	131	42	25
Proprietors and firm members.....do....	136	10	86	17	17	7	45	109	32	18
Performing manual labor.....do....	5,614	402	2,205	2,502	736	445	884	2,337	948	708
Man-hours worked by production, development, and exploration workers, total.....1,000..	5,086	333	2,031	2,241	609	342	695	2,337	948	708
At mines, total.....do....	3,641	78	1,547	1,812	224	-	11	3,997	3,948	3,708
Underground.....do....	597	188	133	30	231	226	502	3,195	3,195	3,195
Strip-pits, auger mines, and dredges.....do....	848	67	351	399	154	116	502	3,160	3,160	3,160
Surface (including mine shops and yards).....do....	528	69	174	261	127	103	182	3,160	3,160	3,160
At preparation plants.....do....	112	5	14	74	20	20	40	376	195	62
Man-hours spent on development and exploration work (included above).....do....	47,856	4,321	13,357	26,213	4,939	3,450	5,339	14,366	4,970	5,599
Principal expenses designated below, total.....\$1,000..	19,036	1,286	7,214	8,880	2,886	1,913	2,245	6,372	2,319	2,143
Wages of production, development, and exploration workers.....do....	2,512	199	904	1,061	418	313	515	640	199	284
Salaries of all other employees.....do....	20,778	1,152	3,516	14,987	1,135	895	1,788	4,506	1,404	1,932
Supplies.....do....	70	-	-	70	-	-	-	-	-	-
Raw coal received for preparation.....do....	438	143	83	119	209	201	200	352	281	55
Coal received for resale without further processing.....do....	1,828	157	602	864	137	57	304	1,326	529	415
Purchased fuel.....do....	3,194	1,384	1,038	222	154	71	287	66	18	2
Purchased electric energy.....do....	4,295	115	1,635	1,382	568	567	4,336	2,719	731	1,116
Contract work.....do....	6,290	243	2,311	1,778	911	906	4,633	2,872	841	1,049
Purchased machinery installed.....do....	542	7	27	241	271	271	10	-	-	-
Capital expenditures, total.....do....	1,279	109	478	33	101	99	247	142	91	30
Development and exploration of mineral property.....do....	3,680	123	1,421	1,115	404	402	4,316	2,252	627	797
Preparation plants and other construction.....do....	789	4	385	389	135	134	60	478	123	222
New machinery and equipment.....do....	377	62	99	172	100	78	140	333	125	105
Used plant and equipment.....do....	19	2	7	10	6	4	6	-	-	-
Energy used.....million kwh. equivalent..	1	-	(Z)	(Z)	(Z)	(Z)	-	(Z)	-	-
Coal produced and used at same establishment.....1,000 short tons..	36	13	5	7	21	21	22	144	48	52
Fuels purchased:	7	-	1	6	-	-	4	2	2	-
Coal.....do....	10	4	3	-	-	-	10	-	-	-
Distillate fuel oil.....1,000 barrels..	Gasoline.....1,000 gallons..	586	258	73	165	97	73	334	1,067	453
Residual fuel oil.....do....	Other fuels.....\$1,000..	20	7	3	3	10	10	4	45	7
Gas.....million cu. ft..	Undistributed.....do....	36	4	5	19	21	19	17	125	89
Gasoline.....1,000 gallons..	Electric energy purchased.....million kwh..	111	11	29	61	7	2	14	3	(Z)
Other fuels.....\$1,000..	Electric energy generated and used.....do....	(Z)	-	(Z)	-	15	15	-	-	-
Undistributed.....do....	Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	202	23	51	97	23	18	76	155	58
Electric energy purchased.....million kwh..	Per production worker.....hp..	60	87	41	62	66	105	172	128	138
Electric energy generated and used.....do....	Prime movers.....1,000 hp..	71	15	15	21	17	16	45	148	56
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	Electric motors driven by purchased energy.....do....	71	15	15	21	17	16	45	148	56

TABLE 3B. Detailed Statistics, by Selected Geographic Areas and Types of Operation: 1963

Item	1211.-Bituminous coal								
	United States								
	All establishments	Producing establishments							
		Total	Mines only						Other combinations
			Total	Strip-pit	Underground	Auger	Strip-pit and underground	Strip-pit and auger	
Establishments, total.....number..	6,115	6,078	4,696	570	3,938	97	16	64	11
With 0 to 19 employees.....do....	4,972	4,936	4,227	510	3,560	93	9	51	4
With 20 to 99 employees.....do....	851	850	427	57	341	4	7	13	5
With 100 employees and over.....do....	292	292	42	3	37	-	-	-	2
Including mines, culm banks, and dredges.....do....	5,941	5,904	4,696	570	3,938	97	16	64	11
Including preparation plants.....do....	1,382	1,382	-	-	-	-	-	-	-
Net production of coal, total.....1,000 short tons..	458,999	458,999	130,234	33,599	80,177	3,307	1,227	6,276	5,648
From underground operations.....do....	305,379	305,379	84,853	-	80,177	-	757	-	3,919
From strip-pit operations.....do....	142,162	142,162	39,584	33,599	-	-	470	4,575	940
From auger and dredge operations.....do....	11,458	11,458	5,797	-	-	3,307	-	1,701	789
Gross shipments of coal.....do....	539,866	539,866	138,843	34,783	86,667	3,367	1,242	6,357	6,427
Net shipments of coal, total.....do....	459,301	459,301	61,374	17,114	36,332	2,629	551	3,582	1,166
Raw coal sold for use without preparation.....do....	65,418	65,418	61,374	17,114	36,332	2,629	551	3,582	1,166
Prepared coal.....do....	393,883	393,883	-	-	-	-	-	-	-
Value of shipments and receipts, total.....\$1,000..	2,358,326	2,358,326	501,144	116,480	323,457	9,786	5,131	22,035	24,255
Raw coal transferred for preparation and resales.....do....	295,161	295,161	270,591	53,873	181,674	2,387	2,865	10,544	19,248
Net shipments and receipts, total.....do....	2,063,165	2,063,165	230,553	62,607	141,783	7,399	2,266	11,491	5,007
Coal net shipments.....do....	2,059,046	2,059,046	228,780	61,503	141,177	7,399	2,266	11,491	5,006
Other products and services.....do....	4,119	4,119	1,773	1,104	606	-	-	-	1
Value added in mining.....do....	1,578,078	1,577,430	376,740	83,374	250,107	7,092	4,162	16,554	15,451
Persons in industry, total <sup>1</sup> .....number..	136,458	132,325	46,509	5,702	37,523	509	390	916	1,469
Production, development, and exploration workers, average for the year.....do....	116,975	116,861	39,296	4,693	31,800	402	348	806	1,247
January.....do....	117,073	116,986	39,158	4,627	31,933	365	330	806	1,097
February.....do....	118,447	118,353	39,519	4,624	32,255	376	339	817	1,108
March.....do....	117,330	117,234	39,285	4,603	31,978	378	344	823	1,159
April.....do....	116,115	116,005	39,124	4,680	31,659	416	356	834	1,179
May.....do....	116,039	115,930	38,765	4,716	31,200	396	372	822	1,259
June.....do....	115,883	115,772	38,727	4,641	31,231	409	368	812	1,266
July.....do....	114,958	114,820	38,768	4,654	31,288	404	385	774	1,263
August.....do....	115,689	115,567	38,940	4,718	31,338	410	390	781	1,303
September.....do....	117,256	117,140	39,212	4,631	31,804	411	337	778	1,251
October.....do....	118,926	118,794	40,106	4,781	32,668	430	311	759	1,157
November.....do....	118,846	118,716	40,199	4,736	32,680	426	289	798	1,270
December.....do....	120,000	119,879	40,509	4,748	32,943	418	287	788	1,325
Other employees <sup>2</sup> .....do....	15,071	11,065	3,616	498	2,760	33	30	78	217
Proprietors and firm members.....do....	4,412	4,399	3,597	511	2,963	74	12	32	5
Performing manual labor.....do....	3,620	3,611	3,061	441	2,514	71	10	22	3
Man-hours worked by production, development, and exploration workers, total.....1,000..	214,421	214,209	65,479	9,145	51,025	740	667	1,611	2,291
At mines, total.....do....	193,555	193,350	65,479	9,145	51,025	740	667	1,611	2,291
Underground.....do....	144,694	144,624	50,037	-	48,073	-	379	-	1,585
Strip-pits, auger mines, and dredges.....do....	28,869	28,826	11,059	8,213	-	693	246	1,510	397
Surface (including mine shops and yards).....do....	19,992	19,900	4,383	932	2,952	47	42	101	309
At preparation plants.....do....	20,866	20,859	-	-	-	-	-	-	-
Man-hours spent on development and exploration work (included above).....do....	2,592	2,479	1,008	124	839	-	2	20	23
Principal expenses designated below, total <sup>1</sup> .....\$1,000..	1,552,769	1,517,681	308,668	61,145	211,617	5,081	2,826	10,947	17,052
Wages of production, development, and exploration workers.....do....	642,338	641,696	162,990	24,797	122,598	1,889	1,478	4,597	7,631
Salaries of all other employees <sup>1</sup> .....do....	101,153	78,081	18,596	2,853	13,027	80	127	562	1,947
Supplies.....do....	649,255	648,826	85,153	19,166	56,496	1,121	912	2,218	5,240
Raw coal received for preparation.....do....	10,123	10,123	3,309	2,472	458	1	-	378	-
Coal received for resale without further processing.....do....	19,804	19,769	7,292	4,439	1,439	350	142	576	346
Purchased fuel.....do....	56,354	56,280	11,185	1,386	8,973	32	63	54	677
Purchased electric energy.....do....	64,742	62,906	20,143	6,032	8,626	1,608	104	2,562	2,111
Contract work.....do....	190,805	185,878	42,071	11,898	23,768	1,617	621	2,322	1,845
Capital expenditures, total.....do....	210,835	202,886	44,749	12,287	26,410	2,035	873	2,629	515
Development and exploration of mineral property.....do....	7,302	6,498	1,597	631	674	22	34	187	49
Preparation plants and other construction.....do....	38,055	35,402	8,986	787	7,261	595	47	236	60
New machinery and equipment.....do....	145,668	141,238	28,602	9,212	15,474	1,268	697	1,630	321
Used plant and equipment.....do....	19,810	19,748	5,564	1,657	3,001	150	95	576	85
Energy used.....million kwh. equivalent..	15,598	15,582	5,315	1,427	3,445	87	41	162	153
Coal produced and used at establishment.....1,000 short tons..	627	627	277	20	257	-	(2)	(2)	-
Fuels purchased:									
Coal.....do....	73	73	64	(2)	64	-	-	-	-
Distillate fuel oil.....1,000 barrels..	1,827	1,826	587	385	70	10	17	58	47
Residual fuel oil.....do....	217	217	88	59	10	3	-	12	4
Gas.....million cu. ft..	972	972	184	103	72	-	-	(2)	9
Gasoline.....1,000 gallons..	22,211	22,195	7,756	5,024	1,755	216	102	407	252
Other fuels.....\$1,000..	1,014	1,014	418	146	263	9	-	-	-
Undistributed.....do....	1,456	1,431	1,058	631	102	218	18	89	-
Electric energy purchased.....million kwh..	4,997	4,989	835	104	668	2	4	4	53

Item	1211.-Bituminous coal--Continued										
	United States--Continued										
	Producing establishments--Continued										
	Mines with preparation plants										
	Total	With mechanical cleaning (washing or air separation)						With mechanical crushing, screening, or sizing only			Strip-pit with--
		Total	Strip-pit	Underground	Strip-pit and underground	Strip-pit and auger	Other combinations and dredge	Total	Crushing	Screening or sizing only	
Establishments, total.....number..	1,208	461	108	301	17	15	20	747	185	48	
With 0 to 19 employees.....do....	569	58	25	25	1	2	5	511	117	38	
With 20 to 99 employees.....do....	392	175	56	94	7	13	5	217	66	10	
With 100 employees and over.....do....	247	228	27	182	9	-	10	19	2	-	
Including mines, culm banks, and dredges.....do....	1,208	461	108	301	17	15	20	747	185	48	
Including preparation plants.....do....	1,208	461	108	301	17	15	20	747	185	48	
Net production of coal, total.....1,000 short tons..	328,765	266,216	58,161	176,446	13,169	3,568	14,872	62,549	23,537	2,586	
From underground operations.....do....	220,526	195,464	-	176,446	8,491	-	10,527	25,062	-	-	
From strip-pit operations.....do....	102,578	68,596	58,161	-	4,678	3,084	2,673	33,982	23,537	2,586	
From auger and dredge operations.....do....	5,661	2,156	-	-	-	484	1,672	3,505	-	-	
Gross shipments of coal.....do....	347,062	280,724	61,497	185,524	13,483	5,363	14,857	66,338	24,506	2,745	
Net shipments of coal, total.....do....	343,966	279,251	61,497	184,051	13,483	5,363	14,857	64,715	24,489	2,745	
Raw coal sold for use without preparation.....do....	4,044	2,831	294	1,678	507	-	352	1,213	222	92	
Prepared coal.....do....	339,922	276,420	61,203	182,373	12,976	5,363	14,505	63,502	24,267	2,653	
Value of shipments and receipts, total.....\$1,000..	1,585,920	1,327,129	234,818	937,098	65,726	22,627	66,860	258,791	86,977	11,073	
Raw coal transferred for preparation and resales.....do....	24,152	13,106	297	12,627	65,726	22,627	-	11,046	754	104	
Net shipments and receipts, total.....do....	1,561,768	1,314,023	234,521	924,471	65,726	22,627	66,860	247,745	86,223	10,969	
Coal net shipments.....do....	1,559,507	1,312,682	233,919	923,899	65,554	22,484	66,860	246,825	85,794	10,616	
Other products and services.....do....	2,261	1,341	602	572	(D)	(D)	-	920	429	353	
Value added in mining.....do....	1,159,320	971,876	175,034	690,656	47,562	10,864	47,760	187,444	62,874	8,299	
Persons in industry, total <sup>1</sup> .....number..	83,063	66,655	7,008	52,807	2,943	795	3,102	16,408	3,973	638	
Production, development, and exploration workers,											
average for the year.....do....	75,208	60,708	6,178	48,174	2,772	730	2,854	14,500	3,490	504	
January.....do....	75,355	60,337	6,195	47,884	2,625	713	2,920	15,018	3,500	570	
February.....do....	76,471	61,561	6,217	48,944	2,727	712	2,961	14,910	3,487	557	
March.....do....	75,575	60,968	6,241	48,465	2,750	730	2,782	14,607	3,449	556	
April.....do....	74,483	60,684	6,194	48,012	2,775	698	3,005	13,799	3,406	494	
May.....do....	74,816	60,737	6,151	48,144	2,848	704	2,890	14,079	3,413	468	
June.....do....	74,631	60,751	6,080	48,252	2,819	704	2,896	13,880	3,421	462	
July.....do....	73,651	60,267	6,106	47,606	2,797	712	3,046	13,384	3,457	443	
August.....do....	74,301	60,373	6,206	47,705	2,824	733	2,905	13,928	3,483	483	
September.....do....	75,537	60,994	6,122	48,305	2,776	720	3,071	14,543	3,551	484	
October.....do....	76,351	61,107	6,079	48,566	2,767	732	2,963	15,244	3,616	521	
November.....do....	76,138	60,742	6,116	48,366	2,668	753	2,839	15,396	3,616	509	
December.....do....	77,006	61,574	6,109	48,967	2,693	743	3,062	15,432	3,661	518	
Other employees <sup>2</sup> .....do....	7,138	5,821	755	4,591	170	61	244	1,317	359	95	
Proprietors and firm members.....do....	717	126	75	42	1	4	4	591	124	39	
Performing manual labor.....do....	529	69	34	30	1	3	1	460	85	31	
Man-hours worked by production, development, and											
exploration workers, total.....1,000..	144,374	116,799	13,102	91,043	5,328	1,652	5,674	27,575	7,216	1,109	
At mines, total.....do....	127,871	102,848	10,500	81,550	4,474	1,227	5,097	25,023	6,299	931	
Underground.....do....	94,587	81,334	-	73,559	3,572	-	4,203	13,253	-	-	
Strip-pits, auger mines, and dredges.....do....	17,767	8,737	6,823	-	552	1,045	317	9,030	5,579	771	
Surface (including mine shops and yards).....do....	15,517	12,777	3,677	7,991	350	182	577	2,740	720	160	
At preparation plants.....do....	16,503	13,951	2,602	9,493	854	425	577	2,552	917	178	
Man-hours spent on development and exploration work											
(included above).....do....	1,430	774	171	505	36	12	50	656	145	14	
Principal expenses designated below, total <sup>1</sup> .....\$1,000..	960,118	802,329	114,456	592,359	37,327	16,240	41,947	157,789	47,546	6,278	
Wages of production, development, and exploration											
workers.....do....	465,607	393,673	48,110	303,167	18,136	4,032	20,228	71,934	18,922	2,512	
Salaries of all other employees <sup>1</sup> .....do....	57,306	50,114	5,965	39,856	1,403	672	2,218	7,192	2,110	475	
Supplies.....do....	269,430	230,732	23,041	169,695	211,280	23,041	12,846	38,698	13,038	1,843	
Raw coal received for preparation.....do....	68,673	55,598	11,168	37,551	1,181	5,677	21	13,075	3,377	476	
Coal received for resale without further processing.....do....	6,472	5,507	240	5,106	(2)	-	-	965	121	89	
Purchased fuel.....do....	12,007	5,906	3,122	1,437	388	725	234	6,101	3,505	498	
Purchased electric energy.....do....	42,866	38,404	7,658	26,743	1,940	334	1,729	4,462	1,095	156	
Contract work.....do....	37,757	22,395	4,162	8,804	2,999	1,759	4,671	15,362	5,378	229	
Purchased machinery installed.....do....	138,640	108,770	39,241	58,217	6,320	1,598	3,394	29,870	16,544	1,008	
Capital expenditures, total.....do....	149,245	112,059	39,838	61,111	5,944	1,371	3,795	37,186	18,955	1,525	
Development and exploration of mineral property.....do....	4,494	2,920	310	2,342	129	7	132	1,574	592	32	
Preparation plants and other construction.....do....	21,202	14,037	2,606	10,194	508	84	645	7,165	3,391	401	
New machinery and equipment.....do....	109,491	85,424	33,891	42,453	5,143	1,019	2,918	24,067	13,014	847	
Used plant and equipment.....do....	14,058	9,678	3,031	6,122	164	261	100	4,380	1,958	245	
Energy used.....million kwh.equivalent..	9,440	6,876	1,700	4,273	291	236	376	2,564	1,093	129	
Coal produced and used at establishment.....1,000 short tons..	294	221	33	169	2	1	16	73	14	(2)	
Fuels purchased:											
Coal.....do....	9	9	3	3	-	3	-	(2)	-	-	
Distillate fuel oil.....1,000 barrels..	1,219	645	424	75	32	83	31	574	343	56	
Residual fuel oil.....do....	118	39	21	14	4	-	-	79	40	1	
Gas.....million cu. ft..	739	662	25	611	19	7	-	77	62	-	
Gasoline.....1,000 gallons..	13,949	6,558	2,979	1,969	493	865	252	7,391	4,141	516	
Other fuels.....\$1,000..	592	208	-	169	29	10	-	384	261	19	
Undistributed.....do....	214	70	30	27	9	4	-	144	41	-	
Electric energy purchased.....million kwh..	3,884	3,427	545	2,491	176	25	190	457	83	8	
Electric energy generated and used.....do....	42	39	26	11	1	1	-	3	1	(2)	
Horsepower rating of power equipment (prime movers and elec-											
tric motors driven by purchased energy), total.....1,000 hp..	4,067	3,155	802	2,009	126	79	139	912	383	58	
Per production worker.....hp..	54	52	130	42	45	108	49	63	110	115	
Prime movers.....1,000 hp..	1,449	869	446	291	29	63	40	580	310	42	
Electric motors driven by purchased energy.....do....	2,618	2,286	356	1,718	97	16	99	332	73	16	
Horsepower rating of electric motors driven by											
energy generated at the establishment.....do....	40	20	6	14	(2)	(2)	-	20	1	(2)	

See footnotes at end of table.

TABLE 3B. Detailed Statistics, by Selected Geographic Areas and Types of Operation: 1963-Con.

Item	1211.--Bituminous coal--Continued									Nonproducing establishments
	United States--Continued									
	Producing establishments--Continued									
	Mines with preparation plants--Continued				Preparation plants only					
	With mechanical crushing, screening, or sizing only--Continued				Total	With mechanical--				
	Underground with--		Strip-pit and auger and auger only	Strip-pit and underground and other combinations		Cleaning	Crushing	Screening or sizing only		
Crushing	Screening or sizing only									
Establishments, total.....number..	236	193	66	19	174	73	88	13	37	
With 0 to 19 employees.....do....	142	169	38	7	140	48	80	12	36	
With 20 to 99 employees.....do....	79	22	28	12	31	22	8	1	1	
With 100 employees and over.....do....	15	2	-	-	3	3	-	-	-	
Including mines, culm banks, and dredges.....do....	236	193	66	19	-	-	-	-	37	
Including preparation plants.....do....	236	193	66	19	174	73	88	13	-	
Net production of coal, total.....1,000 short tons..	19,756	4,227	10,017	2,426	-	-	-	-	-	
From underground operations.....do....	19,756	4,227	-	1,079	-	-	-	-	-	
From strip-pit operations.....do....	-	-	7,044	815	-	-	-	-	-	
From auger and dredge operations.....do....	-	-	2,973	532	-	-	-	-	-	
Gross shipments of coal.....do....	20,799	4,269	11,593	2,426	53,961	38,998	13,319	1,644	-	
Net shipments of coal, total.....do....	19,299	4,232	11,524	2,426	53,961	38,998	13,319	1,644	-	
Raw coal sold for use without preparation.....do....	150	147	483	119	-	-	-	-	-	
Prepared coal.....do....	19,149	4,085	11,041	2,307	53,961	38,998	13,319	1,644	-	
Value of shipments and receipts, total.....\$1,000..	93,876	16,915	38,428	11,522	271,262	211,168	52,465	7,629	-	
Raw coal transferred for preparation and resales.....do....	9,293	346	312	237	418	211,168	52,465	-	-	
Net shipments and receipts, total.....do....	84,583	16,569	38,116	11,285	270,844	211,168	52,465	7,629	-	
Coal net shipments.....do....	84,583	16,569	38,116	11,285	270,759	211,025	52,105	7,629	-	
Other products and services.....do....	-	-	-	-	85	(D)	(D)	-	-	
Value added in mining.....do....	72,709	12,678	24,562	6,322	41,370	30,281	9,603	1,486	648	
Persons in industry, total <sup>1</sup> .....number..	7,274	2,367	1,615	541	2,753	1,973	676	104	162	
Production, development, and exploration workers, average for the year.....do....	6,548	2,008	1,466	484	2,357	1,702	561	94	114	
January.....do....	6,837	2,170	1,432	509	2,473	1,816	562	95	87	
February.....do....	6,768	2,158	1,436	504	2,363	1,707	560	96	94	
March.....do....	6,541	2,138	1,431	492	2,374	1,718	561	95	96	
April.....do....	6,216	1,793	1,417	473	2,398	1,744	562	92	110	
May.....do....	6,496	1,768	1,429	505	2,349	1,682	563	104	109	
June.....do....	6,314	1,736	1,480	467	2,414	1,762	560	92	111	
July.....do....	5,728	1,795	1,490	471	2,401	1,757	563	81	138	
August.....do....	6,191	1,811	1,487	473	2,326	1,678	559	89	122	
September.....do....	6,499	2,056	1,470	483	2,391	1,736	572	83	116	
October.....do....	6,789	2,318	1,496	504	2,337	1,688	568	81	132	
November.....do....	6,965	2,318	1,521	467	2,379	1,729	560	90	130	
December.....do....	6,923	2,348	1,496	486	2,364	1,726	556	82	121	
Other employees <sup>1</sup> .....do....	540	158	118	47	311	209	96	6	35	
Proprietors and firm members.....do....	186	201	31	10	85	62	19	4	13	
Performing manual labor.....do....	136	178	23	7	21	6	11	4	9	
Man-hours worked by production, development, and exploration workers, total.....1,000..	11,910	3,454	2,980	906	4,356	3,130	1,067	159	212	
At mines, total.....do....	11,111	3,268	2,633	781	-	-	-	-	205	
Underground.....do....	9,841	2,968	-	444	-	-	-	-	70	
Strip-pits, auger mines, and dredges.....do....	-	-	2,394	286	-	-	-	-	43	
Surface (including mine shops and yards).....do....	1,270	300	239	51	-	-	-	-	92	
At preparation plants.....do....	799	186	347	125	4,356	3,130	1,067	159	7	
Man-hours spent on development and exploration work (included above).....do....	351	126	13	7	41	33	7	1	113	
Principal expenses designated below, total <sup>1</sup> .....\$1,000..	60,910	12,384	22,917	7,754	248,895	195,725	46,562	6,608	3,284	
Wages of production, development, and exploration workers.....do....	32,859	7,292	8,034	2,315	13,099	10,187	2,519	393	642	
Salaries of all other employees <sup>1</sup> .....do....	3,193	548	620	246	2,179	1,497	641	41	268	
Supplies.....do....	14,208	3,468	5,158	1,105	9,662	25,703	23,884	417	429	
Raw coal received for preparation.....do....	4,489	2,291	2,320	215,908	172,576	37,760	5,572	-	-	
Coal received for resale without further processing.....do....	313	194	99	342	(2)	-	-	-	-	
Purchased fuel.....do....	365	86	1,503	144	470	381	82	7	35	
Purchased electric energy.....do....	2,355	357	365	134	2,229	1,791	368	70	74	
Contract work.....do....	3,128	439	4,847	1,341	5,006	3,590	1,308	108	1,836	
Purchased machinery installed.....do....	7,053	1,333	3,190	742	5,167	4,292	849	26	4,927	
Capital expenditures, total.....do....	10,744	1,640	3,587	735	8,892	7,446	1,389	57	7,949	
Development and exploration of mineral property.....do....	493	331	125	1	407	299	91	17	804	
Preparation plants and other construction.....do....	2,861	232	95	185	5,214	4,641	553	20	2,653	
New machinery and equipment.....do....	6,079	740	2,904	483	3,145	2,475	651	19	4,430	
Used plant and equipment.....do....	1,311	337	463	66	126	31	94	1	62	
Energy used.....million kwh. equivalent..	540	58	703	41	827	756	64	7	16	
Coal produced and used at establishment..1,000 short tons..	20	(Z)	39	(Z)	56	53	3	-	-	
Fuels purchased:										
Coal.....do....	(Z)	-	(Z)	-	(Z)	(Z)	(Z)	-	-	
Distillate fuel oil.....1,000 barrels..	20	5	137	13	20	14	6	(Z)	1	
Residual fuel oil.....do....	5	(Z)	33	-	11	11	-	-	-	
Gas.....million cu. ft..	3	4	8	-	49	37	12	-	-	
Gasoline.....1,000 gallons..	790	213	1,436	295	490	350	135	5	16	
Other fuels.....\$1,000..	17	-	86	1	4	4	-	-	-	
Undistributed.....do....	50	-	49	4	159	146	9	4	25	
Electric energy purchased.....million kwh..	297	40	22	7	270	244	20	6	8	
Electric energy generated and used.....do....	2	-	(Z)	-	(Z)	-	(Z)	-	-	

TABLE 3B. Detailed Statistics, by Selected Geographic Areas and Types of Operation: 1963-Con.

Item	1211.--Bituminous coal--Continued												
	Northeast--Pennsylvania												
	All establish- ments	Producing establishments											
		Mines only			Mines with preparation plants								
		Strip-pit	Under- ground	Strip-pit and auger	With mechanical cleaning			With mechanical crushing, screening, or sizing only					Mechan- ical cleaning plants only
					Strip-pit	Under- ground	Strip-pit and auger	Strip-pit with--		With crushing	Under- ground	Strip-pit and auger only	
								Crushing	Screening and sizing only				
Establishments, total.....number..	1,174	234	630	17	18	53	10	55	15	32	18	12	
With 0 to 19 employees.....do....	988	214	598	15	8	3	1	33	8	20	13	8	
With 20 to 99 employees.....do....	142	20	22	2	10	19	9	21	7	11	5	3	
With 100 employees and over.....do....	44	-	10	-	-	31	-	1	-	1	-	1	
Including mines, culm banks, and dredges.....do....	1,144	234	630	17	18	53	10	55	15	32	18	-	
Including preparation plants.....do....	267	-	-	-	18	53	10	55	15	32	18	12	
Net production of coal, total.....1,000 short tons..	72,899	9,025	12,986	1,546	2,730	30,827	2,813	5,033	1,449	1,973	1,676	-	
From underground operations.....do....	47,274	-	12,986	-	-	30,827	-	-	-	1,973	-	-	
From strip-pit operations.....do....	24,480	9,025	-	1,230	2,730	-	2,643	5,033	1,449	-	1,451	-	
From auger and dredge operations.....do....	1,145	-	-	316	-	-	170	-	-	-	225	-	
Gross shipments of coal.....do....	390,217	39,216	15,406	1,552	2,883	33,805	4,360	5,405	1,600	2,008	1,721	8,133	
Net shipments of coal, total.....do....	371,886	34,400	13,881	1,148	2,883	(D)	4,360	(D)	1,600	2,007	1,721	8,133	
Raw coal sold for use without preparation.....do....	310,315	34,400	3,881	1,148	124	(Z)	-	186	-	54	-	-	
Prepared coal.....do....	61,571	-	-	-	2,759	(D)	4,360	(D)	1,600	1,953	1,721	8,133	
Value of shipments and receipts, total.....\$1,000..	438,865	32,758	64,400	5,492	12,062	193,938	18,256	20,456	6,457	8,732	6,395	52,431	
Raw coal transferred for preparation and resales.....do....	75,404	16,551	47,366	1,799	12,062	8,390	18,256	20,456	6,457	8,732	6,395	52,431	
Net shipments and receipts, total.....do....	363,461	16,207	17,034	3,693	11,843	185,548	18,113	20,034	6,328	(D)	(D)	(D)	
Coal net shipments.....do....	363,461	16,207	17,034	3,693	(D)	185,548	(D)	(D)	(D)	(D)	(D)	(D)	
Other products and services.....do....	-	-	-	-	-	-	-	-	-	-	-	-	
Value added in mining.....do....	275,840	23,517	48,564	3,618	6,861	140,794	8,460	14,873	4,972	7,042	3,588	5,267	
Persons in industry, total <sup>1</sup> .....number..	24,918	2,090	6,079	248	499	10,333	609	1,235	322	776	317	400	
Production, development, and exploration workers, average for the year.....do....	20,823	1,663	5,004	220	421	9,431	556	1,113	261	673	284	352	
January.....do....	20,782	1,680	5,153	219	374	9,193	538	1,119	279	719	281	349	
February.....do....	20,877	1,684	5,193	224	375	9,240	538	1,127	266	719	275	352	
March.....do....	21,053	1,675	5,211	229	422	9,376	554	1,113	280	724	281	362	
April.....do....	20,907	1,676	4,953	229	376	9,580	523	1,130	247	697	270	384	
May.....do....	21,183	1,669	4,919	227	414	9,874	533	1,132	245	663	283	383	
June.....do....	20,983	1,649	4,877	221	373	9,854	525	1,143	247	674	324	396	
July.....do....	20,336	1,644	4,877	214	380	9,212	533	1,137	240	489	281	390	
August.....do....	20,314	1,665	4,791	209	419	9,165	559	1,126	245	654	288	355	
September.....do....	21,187	1,657	4,894	211	364	9,825	555	1,130	236	664	262	363	
October.....do....	20,454	1,687	5,071	218	396	9,338	558	1,093	264	669	265	309	
November.....do....	20,744	1,643	5,095	217	429	9,309	578	1,081	273	651	284	308	
December.....do....	21,233	1,663	5,085	209	403	9,626	568	1,114	277	645	281	321	
Other employees <sup>2</sup> .....do....	3,133	175	550	18	56	898	52	74	47	79	21	44	
Proprietors and firm members.....do....	962	252	516	10	22	4	1	48	14	24	12	4	
Performing manual labor.....do....	821	215	462	5	17	1	1	35	7	21	10	1	
Man-hours worked by production, development, and exploration workers, total.....1,000..	38,874	3,290	8,015	424	1,024	17,778	1,319	2,334	604	1,211	583	687	
At mines, total.....do....	35,009	3,290	8,015	424	864	16,047	940	1,964	519	1,106	515	-	
Underground.....do....	23,845	-	7,371	-	-	14,563	-	-	-	1,000	-	-	
Strip-pits, auger mines, and dredges.....do....	8,168	3,083	-	405	761	-	772	1,869	516	-	466	-	
Surface (including mine shops and yards).....do....	2,996	207	644	19	101	1,484	168	95	3	106	49	-	
At preparation plants.....do....	3,865	-	-	-	162	1,731	379	370	85	105	68	687	
Man-hours spent on development and exploration work (included above).....do....	562	51	153	-	123	56	11	53	13	35	2	-	
Principal expenses designated below, total <sup>1</sup> .....\$1,000..	311,058	18,076	43,036	3,240	7,749	123,906	13,023	11,861	3,509	5,616	4,215	52,956	
Wages of production, development, and exploration workers.....do....	114,974	7,811	23,324	1,169	2,098	59,925	2,869	5,103	1,326	3,332	1,415	2,490	
Salaries of all other employees <sup>1</sup> .....do....	25,460	656	3,916	122	304	8,724	571	367	232	498	91	251	
Supplies.....do....	63,189	5,337	10,797	558	1,370	32,574	2,577	3,086	964	1,207	979	1,809	
Raw coal received for preparation.....do....	68,156	-	-	-	505	12,147	4,537	1,140	523	-	-	44,347	
Coal received for resale without further processing.....do....	2,139	428	19	17	119	946	31	45	10	145	21	80	
Purchased fuel.....do....	5,404	1,659	149	98	468	274	528	1,210	288	49	298	39	
Purchased electric energy.....do....	10,360	290	1,934	29	150	6,441	194	63	63	287	26	538	
Contract work.....do....	21,376	1,895	2,897	1,247	2,735	2,875	1,716	847	103	98	1,385	3,402	
Purchased machinery installed.....do....	36,275	4,450	5,485	141	1,712	13,478	1,288	1,622	512	662	389	3,088	
Capital expenditures, total.....do....	43,874	4,818	5,444	216	1,858	15,591	1,075	2,430	978	758	291	6,139	
Development and exploration of mineral property.....do....	1,201	223	56	7	13	84	7	135	14	53	8	147	
Preparation plants and other construction.....do....	9,344	357	1,864	16	189	1,379	71	53	352	155	2	4,210	
New machinery and equipment.....do....	26,953	3,393	2,671	182	937	10,900	802	1,995	597	484	248	1,774	
Used plant and equipment.....do....	6,376	845	853	11	719	3,228	195	247	15	66	33	8	
Energy used.....million kwh. equivalent..	2,625	472	227	31	128	878	174	342	79	38	86	79	
Coal produced and used at establishment..1,000 short tons..	38	1	4	-	-	28	1	(Z)	-	1	(Z)	3	
Fuels purchased:													
Coal.....do....	4	(Z)	(Z)	-	1	-	3	-	-	(Z)	(Z)	-	
Distillate fuel oil.....1,000 barrels..	506	150	13	7	46	14	61	114	39	2	40	2	
Residual fuel oil.....do....	80	30	1	4	-	1	-	33	-	-	5	2	
Gas.....million cu. ft..	425	103	34	(Z)	17	235	7	-	-	-	-	12	
Gasoline.....1,000 gallons..	5,387	1,643	189	40	719	305	652	1,028	203	127	168	64	
Other fuels.....\$1,000..	154	92	7	-	-	4	-	22	10	-	6	-	
Undistributed.....do....	435	81	2	36	-	10	-	171	-	13	-	-	
Electric energy purchased.....million kwh..	821	19	153	1	10	550	13	2	3	19	1	43	
Electric energy generated and used.....do....	3	-	(Z)	(Z)	-	-	1	-	-	1	(Z)	-	
Horsepower rating of power equipment (prime movers and elec- tric motors driven by purchased energy), total....1,000 hp..	1,164	109	241	23	71	402	56	98	19	23	29	50	
Per production worker.....hp..	56	65	48	105	169	43	101	88	73	34	102	142	
Prime movers.....1,000 hp..	487	93	57	19	65	37	48	95	19	5	28	4	
Electric motors driven by purchased energy.....do....	677	.16	184	4	6	365	8	3	(Z)	18	1	46	
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	5	(Z)	2	(Z)	-	-	(Z)	1	(Z)	1	(Z)	-	

See footnotes at end of table.

TABLE 3B. Detailed Statistics, by Selected Geographic Areas and Types of Operation: 1963-Con.

1211.--Bituminous coal--Continued									
East North Central									
Ohio									
Item	All establishments	Producing establishments							
		Mines only			Mines with preparation plants				Preparation plants only
		Strip-pit	Underground	Strip-pit and auger	With mechanical cleaning		With mechanical crushing		
					Strip-pit	Underground	Strip-pit	Strip-pit and auger	
Establishments, total.....number..	382	90	137	15	8	10	49	16	8
With 0 to 19 employees.....do....	302	79	128	10	1	-	31	5	6
With 20 to 99 employees.....do....	64	8	7	5	5	4	18	11	1
With 100 employees and over.....do....	16	3	2	-	2	6	-	-	1
Including mines, culm banks, and dredges.....do....	374	90	137	15	8	10	49	16	-
Including preparation plants.....do....	125	-	-	-	8	10	49	16	8
Net production of coal, total.....1,000 short tons..	37,821	7,953	3,067	1,549	3,987	6,892	5,958	3,442	-
From underground operations.....do....	11,455	-	3,067	-	-	6,892	-	-	-
From strip-pit operations.....do....	24,710	7,953	-	1,212	3,987	-	5,958	2,960	-
From auger and dredge operations.....do....	1,656	-	-	337	-	-	-	482	-
Gross shipments of coal.....do....	46,306	8,642	3,863	1,549	3,985	7,741	6,303	3,691	5,575
Net shipments of coal, total.....do....	38,312	3,671	1,251	1,159	3,985	7,741	6,303	3,622	5,575
Raw coal sold for use without preparation.....do....	7,837	3,671	1,251	1,159	133	-	-	5	-
Prepared coal.....do....	30,475	-	-	-	3,852	7,741	6,303	3,617	5,575
Value of shipments and receipts, total.....\$1,000..	166,206	25,030	9,763	5,186	13,068	33,881	23,424	12,763	23,630
Raw coal transferred for preparation and resales.....do....	20,772	12,870	5,559	1,511	3	8	-	-	-
Net shipments and receipts, total.....do....	145,434	12,160	4,204	3,675	13,065	33,873	23,424	12,763	23,630
Coal net shipments.....do....	144,455	12,029	4,204	3,675	13,065	33,873	22,834	12,433	23,630
Other products and services.....do....	979	131	-	-	-	-	(D)	(D)	-
Value added in mining.....do....	104,869	17,386	7,422	3,751	8,022	24,295	16,119	8,339	5,399
Persons in industry, total <sup>1</sup> .....number..	8,543	1,220	1,231	241	595	2,015	1,031	580	365
Production, development, and exploration workers, average for the year.....do....	7,090	1,050	1,046	214	531	1,762	936	526	304
January.....do....	7,041	1,052	939	211	511	1,852	933	506	302
February.....do....	7,114	1,055	978	217	513	1,861	935	519	297
March.....do....	7,100	1,029	987	212	516	1,863	951	515	296
April.....do....	7,113	1,052	1,032	215	522	1,876	927	515	292
May.....do....	7,153	1,059	1,041	215	517	1,877	950	510	294
June.....do....	7,154	1,051	1,059	201	524	1,827	938	552	303
July.....do....	7,100	1,050	1,051	195	531	1,807	909	556	306
August.....do....	6,942	1,059	1,047	207	537	1,661	918	508	309
September.....do....	6,923	1,042	1,047	212	540	1,642	917	538	310
October.....do....	7,019	1,071	1,110	185	550	1,641	924	560	314
November.....do....	7,165	1,049	1,120	222	551	1,637	917	570	318
December.....do....	7,168	1,055	1,105	216	572	1,651	917	574	331
Other employees <sup>1</sup> .....do....	1,226	114	99	22	59	250	71	47	59
Proprietors and firm members.....do....	227	56	86	5	5	3	24	7	2
Performing manual labor.....do....	191	50	80	2	2	3	14	4	2
Man-hours worked by production, development, and exploration workers, total.....1,000..	13,759	2,111	1,742	470	1,068	3,118	2,111	1,169	557
At mines, total.....do....	12,118	2,111	1,742	470	732	2,680	1,954	1,034	-
Underground.....do....	4,988	-	1,683	-	-	2,602	-	-	-
Strip-pits, auger mines, and dredges.....do....	5,487	1,705	-	430	411	-	1,610	888	-
Surface (including mine shops and yards).....do....	1,643	406	59	40	321	78	240	146	-
At preparation plants.....do....	1,641	-	-	-	336	438	261	135	557
Man-hours spent on development and exploration work (included above).....do....	170	38	25	15	2	39	29	-	-
Principal expenses designated below, total <sup>1</sup> .....\$1,000..	114,623	15,028	6,995	2,961	11,365	22,804	13,897	8,074	20,677
Wages of production, development, and exploration workers.....do....	41,514	6,355	3,991	1,347	3,528	11,138	5,388	3,078	1,909
Salaries of all other employees <sup>1</sup> .....do....	9,001	902	425	109	427	1,917	649	246	522
Supplies.....do....	30,834	4,903	2,196	949	-	-	24,454	1,785	2,182
Raw coal received for preparation.....do....	21,544	-	-	-	6,345	8,941	1,856	877	15,763
Coal received for resale without further processing.....do....	887	51	46	(2)	-	-	(2)	7	-
Purchased fuel.....do....	3,320	741	171	401	51	936	551	63	63
Purchased electric energy.....do....	2,723	276	184	15	421	748	229	172	205
Contract work.....do....	4,800	1,800	119	370	243	9	385	1,365	33
Purchased machinery installed.....do....	18,948	2,577	797	1,114	6,781	1,716	1,526	1,093	135
Capital expenditures, total.....do....	21,719	2,704	1,035	1,184	9,145	1,879	2,081	1,426	150
Development and exploration of mineral property.....do....	804	163	81	19	42	188	94	74	2
Preparation plants and other construction.....do....	3,019	130	157	29	1,197	808	238	4	16
New machinery and equipment.....do....	16,428	2,218	765	1,000	7,633	881	1,423	1,021	131
Used plant and equipment.....do....	1,468	193	32	136	273	2	326	327	1
Energy used.....million kwh. equivalent..	1,575	238	23	47	194	131	341	156	46
Coal produced and used at establishment.....1,000 short tons..	52	(2)	(2)	-	1	5	11	(2)	-
Fuels purchased:									
Coal.....do....	4	-	-	-	2	2	-	-	-
Distillate fuel oil.....1,000 barrels..	382	84	2	16	70	4	101	56	5
Residual fuel oil.....do....	23	6	-	-	-	-	1	11	5
Gas.....million cu. ft..	70	-	-	-	-	8	55	-	7
Gasoline.....1,000 gallons..	3,705	783	34	77	382	91	1,284	517	77
Other fuels.....\$1,000..	189	83	9	60	-	-	-	36	-
Undistributed.....do....	38	5	8	7	-	-	-	17	-
Electric energy purchased.....million kwh..	239	34	14	1	38	65	19	8	23
Electric energy generated and used.....do....	1	(2)	(2)	-	-	-	-	(2)	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	704	215	47	16	98	66	97	52	3
Per production worker.....hp..	99	205	45	75	185	37	104	99	67
Prime movers.....1,000 hp..	480	188	15	15	66	11	78	42	1
Electric motors driven by purchased energy.....do....	224	27	32	1	32	55	19	10	2
Horsepower rating of electric motors driven by									



TABLE 3B. Detailed Statistics, by Selected Geographic Areas and Types of Operation: 1963--Con.

Item	1211.--Bituminous coal--Continued										
	East North Central--Continued								South Atlantic		
	Indiana				Illinois				Virginia		
	All estab- lishments	Producing establishments		All estab- lishments	Producing establishments		All estab- lishments	Mines only (under- ground)	Underground mines with mechanical cleaning		
		Mines with mechanical cleaning	Mines with mechanical crushing, screening, or sizing only		Mines only (strip-pit)	Mines with mechanical cleaning					
	Strip-pit	Under- ground		Strip-pit	Under- ground						
Establishments, total.....number..	69	8	7	103	17	30	25	769	663	15	
With 0 to 19 employees.....do....	49	1	1	36	14	-	1	643	575	2	
With 20 to 99 employees.....do....	9	3	1	36	3	16	9	116	87	7	
With 100 employees and over.....do....	11	4	5	31	-	14	15	10	1	6	
Including mines, culm banks, and dredges.....do....	69	8	7	103	17	30	25	744	663	15	
Including preparation plants.....do....	34	8	7	77	-	30	25	77	-	15	
Net production of coal, total.....1,000 short tons..	15,241	7,191	3,300	1,409	52,067	2,467	23,553	22,407	29,775	13,793	5,577
From underground operations.....do....	4,321	-	3,300	-	24,528	-	-	22,407	26,836	13,793	5,577
From strip-pit operations.....do....	10,920	7,191	-	1,409	27,536	2,467	23,553	-	2,122	-	-
From auger and dredge operations.....do....	-	-	-	-	3	-	-	-	817	-	-
Gross shipments of coal.....do....	315,216	7,181	3,272	1,556	57,005	3,317	26,915	22,398	83,411	13,832	6,614
Net shipments of coal, total.....do....	315,216	7,181	3,272	1,556	52,245	3,572	26,915	122,392	30,816	7,475	6,614
Raw coal sold for use without preparation.....do....	31,545	-	25	17	827	572	-	78	7,765	7,475	130
Prepared coal.....do....	13,671	7,181	3,247	1,539	51,418	-	26,915	22,314	23,051	-	6,484
Value of shipments and receipts, total.....\$1,000..	57,793	26,341	13,415	6,058	209,098	8,740	104,947	83,325	154,963	48,153	30,606
Raw coal transferred for preparation and resales.....do....	43	-	-	-	10,736	6,974	24	37	25,365	21,285	-
Net shipments and receipts, total.....do....	57,750	26,341	13,415	6,058	198,362	1,766	104,923	83,288	129,598	26,868	30,606
Coal net shipments.....do....	57,750	26,341	13,415	6,058	198,362	1,766	104,923	83,288	129,289	26,868	30,606
Other products and services.....do....	-	-	-	-	-	-	-	-	309	-	-
Value added in mining.....do....	45,969	20,809	10,542	4,671	156,944	6,039	77,432	63,837	95,639	37,133	21,161
Persons in industry, total <sup>1</sup> .....number..	2,994	857	1,124	224	9,027	237	2,887	4,832	12,060	7,355	1,664
Production, development, and exploration workers, average for the year.....do....	2,572	735	1,059	195	7,867	195	2,567	4,459	10,309	6,286	1,538
January.....do....	2,662	733	1,104	215	8,012	190	2,633	4,427	10,241	6,194	1,566
February.....do....	2,732	732	1,174	215	7,832	185	2,627	4,305	10,272	6,244	1,568
March.....do....	2,760	758	1,193	212	7,920	186	2,646	4,384	10,291	6,250	1,595
April.....do....	2,575	760	1,086	178	7,750	186	2,655	4,262	10,111	6,149	1,537
May.....do....	2,522	732	1,088	156	7,846	186	2,624	4,400	10,139	6,170	1,517
June.....do....	2,480	741	1,048	145	7,776	185	2,563	4,426	9,970	6,056	1,469
July.....do....	2,412	729	936	181	7,816	186	2,497	4,403	10,175	6,279	1,441
August.....do....	2,602	723	1,119	190	7,757	187	2,526	4,450	10,128	6,192	1,503
September.....do....	2,413	713	900	123	7,967	188	2,504	4,461	10,238	6,287	1,496
October.....do....	2,404	722	824	219	7,928	220	2,416	4,573	10,616	6,507	1,515
November.....do....	2,405	724	826	223	7,946	221	2,472	4,583	10,679	6,532	1,528
December.....do....	2,504	729	870	229	8,118	220	2,437	4,618	10,674	6,500	1,565
Other employees <sup>2</sup> .....do....	387	122	65	23	1,121	29	315	368	1,040	420	124
Proprietors and firm members.....do....	35	-	-	6	39	13	5	5	711	649	2
Performing manual labor.....do....	29	-	-	2	28	13	-	2	541	498	2
Man-hours worked by production, development, and exploration workers, total.....1,000..	4,763	1,501	1,781	373	15,688	397	5,270	8,783	17,686	9,941	2,872
At mines, total.....do....	4,175	1,136	1,655	344	13,729	397	4,347	7,914	16,395	9,941	2,486
Underground.....do....	2,015	-	1,439	-	7,680	-	-	6,858	15,079	9,524	2,310
Strip-pits, auger mines, and dredges.....do....	1,305	744	-	219	3,113	289	2,612	-	542	-	-
Surface (including mine shops and yards).....do....	855	392	216	125	2,936	108	1,640	1,056	774	417	176
At preparation plants.....do....	588	365	126	29	1,959	-	1,018	869	1,291	-	386
Man-hours spent on development and exploration work (included above).....do....	1	-	-	-	89	2	33	22	308	227	13
Principal expenses designated below, total <sup>1</sup> .....\$1,000..	30,960	10,861	9,845	2,745	117,822	2,726	52,954	49,775	109,840	33,381	20,450
Wages of production, development, and exploration workers.....do....	16,693	5,636	6,110	1,316	56,699	1,519	21,169	30,011	42,580	20,313	8,867
Salaries of all other employees <sup>2</sup> .....do....	3,017	1,016	546	154	8,671	221	2,432	2,330	5,278	1,031	1,077
Supplies.....do....	8,273	3,000	2,786	2,990	31,092	1,487	213,497	214,603	51,860	9,269	5,230
Raw coal received for preparation.....do....	-	-	-	-	11,187	-	10,653	-	-	-	4,258
Coal received for resale without further processing.....do....	43	-	-	(2)	38	-	(2)	(2)	76	18	-
Purchased fuel.....do....	537	236	36	101	1,421	193	911	74	529	218	43
Purchased electric energy.....do....	1,816	973	352	168	7,348	272	3,936	2,746	3,213	1,085	790
Contract work.....do....	581	-	15	16	1,366	438	356	11	6,304	1,447	185
Purchased machinery installed.....do....	10,416	4,629	848	435	23,631	827	14,952	6,108	6,149	2,471	839
Capital expenditures, total.....do....	9,842	3,306	1,164	323	23,929	438	16,790	4,054	8,807	3,488	1,900
Development and exploration of mineral property.....do....	137	-	3	-	469	2	150	11	352	45	169
Preparation plants and other construction.....do....	2,012	49	688	-	2,314	29	843	67	1,969	1,053	426
New machinery and equipment.....do....	7,264	3,143	422	229	18,634	404	14,025	3,694	5,494	2,146	1,220
Used plant and equipment.....do....	429	114	51	94	2,512	3	1,772	282	992	244	85
Energy used.....million kwh. equivalent..	573	210	256	37	1,125	75	684	271	2,225	1,767	99
Coal produced and used at establishment.....1,000 short tons..	38	9	29	(2)	30	-	19	10	238	216	3
Fuels purchased:											
Coal.....do....	-	-	-	-	(2)	-	-	-	(2)	-	(2)
Distillate fuel oil.....1,000 barrels..	64	35	(2)	10	174	29	120	11	38	4	1
Residual fuel oil.....do....	2	-	-	1	11	-	11	-	13	1	4
Gas.....million cu. ft..	-	-	-	-	8	-	8	-	-	-	-
Gasoline.....1,000 gallons..	566	226	16	122	1,766	140	939	140	629	316	81
Other fuels.....\$1,000..	37	-	30	-	4	-	-	-	51	44	-
Undistributed.....do....	-	-	-	-	19	5	-	2	81	59	8
Electric energy purchased.....million kwh..	139	73	25	14	505	19	276	170	254	64	62
Electric energy generated and used.....do....	10	-	10	-	11	-	11	-	-	-	-

TABLE 3B. Detailed Statistics, by Selected Geographic Areas and Types of Operation: 1963-Con.

Item	1211.--Bituminous coal--Continued												
	South Atlantic--Continued												
	Virginia--Continued		West Virginia										
	Under-ground mines with mechanical crushing, screening, or sizing only	Prepara-tion plants only (with mechan-ical -cleaning)	All estab-lishments	Producing establishments								Preparation plants only with mechanical--	
				Mines only			Mines with preparation plants						
			Strip-pit	Under-ground	Strip-pit and auger	With mechanical cleaning		With mechanical crushing		Cleaning	Crushing, screening, or sizing only		
						Under-ground	Strip-pit and under-ground	Under-ground	Strip-pit and auger				
Establishments, total.....number..	29	12	1,554	53	1,175	13	120	7	37	10	22	25	
With 0 to 19 employees.....do....	17	8	1,239	46	1,059	10	5	-	12	3	16	23	
With 20 to 99 employees.....do....	11	4	202	7	103	3	28	3	25	7	5	2	
With 100 employees and over.....do....	1	-	113	-	13	-	87	4	-	-	1	-	
Including mines, culm banks, and dredges.....do....	29	-	1,507	53	1,175	13	120	7	37	10	-	-	
Including preparation plants.....do....	29	12	283	-	-	-	120	7	37	10	22	25	
Net production of coal, total.....1,000 short tons..	5,689	-	134,071	2,908	26,703	1,398	79,275	6,568	2,775	2,042	-	-	
From underground operations.....do....	5,209	-	121,852	-	26,703	-	79,275	6,198	2,775	-	-	-	
From strip-pit operations.....do....	344	-	7,752	2,908	-	966	-	370	-	1,236	-	-	
From auger and dredge operations.....do....	136	-	4,467	-	-	432	-	-	-	806	-	-	
Gross shipments of coal.....do....	1,968	4,629	154,542	2,714	28,189	1,460	83,051	6,772	3,257	2,250	10,678	2,588	
Net shipments of coal, total.....do....	1,968	4,629	132,213	883	11,621	372	83,051	6,772	3,257	2,250	10,678	2,588	
Raw coal sold for use without preparation.....do....	-	-	15,063	883	11,621	372	1,149	-	-	-	-	-	
Prepared coal.....do....	1,968	4,629	117,150	-	-	-	81,902	6,772	3,257	2,250	10,678	2,588	
Value of shipments and receipts, total.....\$1,000..	8,142	21,996	733,409	10,481	113,546	6,149	420,362	41,248	13,281	7,739	57,826	10,706	
Raw coal transferred for preparation and resales.....do....	-	-	88,651	6,306	63,980	4,734	420,362	41,248	13,281	7,739	57,826	10,706	
Net shipments and receipts, total.....do....	8,142	21,996	644,758	4,175	49,566	1,415	41,248	41,248	(D)	7,739	57,826	(D)	
Coal net shipments.....do....	(D)	21,996	644,543	4,170	49,438	1,415	41,248	41,248	(D)	7,739	57,826	(D)	
Other products and services.....do....	-	-	215	5	128	-	(D)	-	-	-	-	-	
Value added in mining.....do....	5,227	3,509	503,435	7,163	88,830	5,024	312,352	29,866	9,065	4,874	8,334	1,787	
Persons in industry, total <sup>1</sup> .....number..	750	203	42,252	595	11,578	195	22,293	1,823	1,164	374	544	141	
Production, development, and exploration workers, average for the year.....do....	688	181	37,192	530	9,821	168	20,323	1,768	1,019	342	473	124	
January.....do....	714	183	36,463	507	9,801	179	19,781	1,640	806	342	671	129	
February.....do....	697	183	37,847	500	9,837	177	21,063	1,660	818	332	495	128	
March.....do....	684	181	36,597	518	9,709	179	20,189	1,679	816	327	496	128	
April.....do....	643	180	37,030	527	9,693	187	20,112	1,699	954	352	495	118	
May.....do....	650	179	36,581	529	9,752	178	19,790	1,754	1,027	322	435	117	
June.....do....	653	179	37,164	531	9,607	177	20,091	1,779	1,069	357	493	116	
July.....do....	641	178	37,461	518	9,624	169	19,839	1,786	1,061	349	485	126	
August.....do....	660	180	37,463	530	9,711	165	20,472	1,808	1,113	366	434	124	
September.....do....	657	177	37,562	519	9,726	167	20,451	1,817	1,089	370	487	125	
October.....do....	732	184	38,140	516	9,941	155	20,709	1,829	1,124	359	488	130	
November.....do....	756	184	38,127	538	10,127	151	20,840	1,827	1,113	352	527	127	
December.....do....	744	184	38,353	499	10,055	156	20,703	1,824	1,128	355	506	132	
Other employees <sup>1</sup> .....do....	36	21	4,101	36	903	21	1,965	55	125	29	71	18	
Proprietors and firm members.....do....	26	1	959	29	854	6	5	-	20	3	-	4	
Performing manual labor.....do....	15	-	829	23	746	4	3	-	15	-	-	2	
Man-hours worked by production, development, and exploration workers, total.....1,000..	1,341	371	69,241	973	15,892	345	40,022	3,362	1,978	684	823	228	
At mines, total.....do....	1,262	-	63,034	973	15,892	345	36,153	2,894	1,790	596	-	-	
Underground.....do....	1,211	-	54,368	-	14,803	-	32,281	2,701	1,623	-	-	-	
Strip-pits, auger mines, and dredges.....do....	-	-	2,745	952	-	283	-	5	-	586	-	-	
Surface (including mine shops and yards).....do....	51	-	5,921	21	1,089	62	3,872	188	167	10	-	-	
At preparation plants.....do....	79	371	6,207	-	-	-	3,869	468	188	88	823	228	
Man-hours spent on development and exploration work (included above).....do....	14	31	655	-	84	5	245	20	191	-	1	-	
Principal expenses designated below, total <sup>1</sup> .....\$1,000..	6,053	19,672	487,522	6,204	70,182	2,636	265,268	24,450	9,924	5,003	52,997	9,819	
Wages of production, development, and exploration workers.....do....	2,820	931	215,260	2,535	39,519	1,086	134,551	11,523	4,805	1,894	2,774	478	
Salaries of all other employees <sup>1</sup> .....do....	179	118	32,403	222	4,753	190	17,518	707	564	188	547	79	
Supplies.....do....	21,646	1,019	124,359	1,459	20,351	2,679	78,357	9,030	2,267	1,489	2,401	240	
Raw coal received for preparation.....do....	823	17,308	75,668	-	-	-	14,854	-	1,664	1,886	47,305	8,604	
Coal received for resale without further processing.....do....	(2)	-	4,636	179	201	(2)	4,091	-	(2)	-	-	(2)	
Purchased fuel.....do....	23	26	3,369	581	537	165	621	78	68	423	218	21	
Purchased electric energy.....do....	191	237	17,234	31	2,476	18	11,518	1,196	290	32	654	83	
Contract work.....do....	371	33	14,593	1,197	2,345	498	3,758	1,916	266	580	10	153	
Purchased machinery installed.....do....	1,192	161	40,010	776	10,331	548	22,147	343	1,681	315	627	254	
Capital expenditures, total.....do....	1,331	297	49,895	905	11,525	783	27,336	1,181	2,020	371	811	597	
Development and exploration of mineral property.....do....	131	29	2,099	68	365	123	1,309	-	14	7	15	20	
Preparation plants and other construction.....do....	338	143	10,259	92	2,726	147	5,075	261	272	2	544	266	
New machinery and equipment.....do....	631	119	34,631	683	7,234	344	19,988	912	1,640	327	237	259	
Used plant and equipment.....do....	531	6	2,906	62	1,200	169	955	8	94	35	15	52	
Energy used.....million kwh. equivalent..	18	23	3,864	170	1,061	41	1,814	142	83	91	108	9	
Coal produced and used at establishment.....1,000 short tons..	(Z)	(Z)	138	-	40	(Z)	80	(Z)	6	-	(Z)	-	
Fuels purchased:													
Coal.....do....	-	(Z)	61	-	61	-	(Z)	-	-	-	-	-	
Distillate fuel oil.....1,000 barrels..	2	(Z)	248	52	34	8	34	9	7	19	3	-	
Residual fuel oil.....do....	-	-	46	13	6	8	1	-	-	17	1	-	
Gas.....million cu. ft..	-	-	324	-	21	-	284	7	(Z)	4	-	-	
Gasoline.....1,000 gallons..	24	84	4,434	1,039	655	201	954	110	172	547	191	17	
Other fuels.....\$1,000..	-	-	136	60	-	-	13	-	-	-	50	-	
Undistributed.....do....	8	-	166	10	-	17	15	-	-	21	84	16	
Electric energy purchased.....million kwh..	12	20	1,494	2	186	1	1,011	120	19	1	62	4	
Electric energy generated and used.....do....	-	-	6	-	4	-	(Z)	1	(Z)	-	-	-	



TABLE 3B. Detailed Statistics, by Selected Geographic Areas and Types of Operation: 1963—Con

Item	1211.—Bituminous coal—Continued										
	East South Central										
	Kentucky										
	All establishments	Producing establishments								Preparation plants only with mechanical—	
		Mines only		Mines with preparation plants							
		Strip-pit	Underground	With mechanical cleaning		Underground with mechanical—		Crushing	Screening or sizing only	Cleaning	Crushing, screening, or sizing only
Strip-pit				Underground	Crushing	Screening or sizing only					
Establishments, total.....number..	1,194	29	848	16	35	31	98	19	34		
With 0 to 19 employees.....do....	972	22	734	4	4	15	90	10	30		
With 20 to 99 employees.....do....	180	7	105	7	12	11	7	9	4		
With 100 employees and over.....do....	42	-	9	5	19	5	1	-	-		
Including mines, culm banks, and dredges.....do....	1,141	29	848	16	35	31	98	-	-		
Including preparation plants.....do....	270	-	-	16	35	31	98	19	34		
Net production of coal, total.....1,000 short tons..	75,010	5,721	18,749	15,150	17,763	4,206	1,632	-	-		
From underground operations.....do....	46,441	-	-	-	17,763	4,206	1,632	-	-		
From strip-pit operations.....do....	25,583	5,721	18,749	15,150	-	-	-	-	-		
From auger and dredge operations.....do....	2,986	-	-	-	-	-	-	-	-		
Gross shipments of coal.....do....	93,013	5,821	19,896	15,150	17,910	4,267	1,632	9,335	6,605		
Net shipments of coal, total.....do....	76,457	3,908	9,245	15,150	17,904	4,261	1,632	9,335	6,605		
Raw coal sold for use without preparation.....do....	16,008	3,908	9,245	-	-	51	110	-	-		
Prepared coal.....do....	60,449	-	-	15,150	17,904	4,210	1,522	9,335	6,605		
Value of shipments and receipts, total.....\$1,000..	353,149	18,029	68,535	50,507	80,914	14,331	5,804	47,804	24,742		
Raw coal transferred for preparation and resales.....do....	353,149	6,134	37,155	50,507	80,914	75	5,804	-	24,742		
Net shipments and receipts, total.....do....	353,149	11,895	31,380	50,507	80,914	14,256	5,804	47,804	24,742		
Coal net shipments.....do....	293,931	11,895	31,380	(D)	80,855	14,256	(D)	47,804	(D)		
Other products and services.....do....	(D)	-	-	-	(D)	-	-	-	-		
Value added in mining.....do....	219,303	13,054	53,141	40,304	56,563	11,234	4,081	7,204	4,044		
Persons in industry, total <sup>1</sup> .....number..	21,517	452	8,604	1,115	5,889	1,352	960	472	285		
Production, development, and exploration workers, average for the year.....do....	18,888	393	7,527	990	5,388	1,228	783	382	257		
January.....do....	18,908	362	7,528	969	5,554	1,261	862	365	244		
February.....do....	18,866	360	7,426	1,006	5,495	1,255	852	365	244		
March.....do....	18,962	365	7,473	1,018	5,504	1,236	856	371	244		
April.....do....	18,480	386	7,387	1,001	5,451	1,088	678	386	245		
May.....do....	18,488	393	7,325	996	5,268	1,262	689	381	262		
June.....do....	18,427	400	7,316	990	5,378	1,102	695	383	248		
July.....do....	18,702	405	7,565	987	5,291	1,252	690	390	248		
August.....do....	18,730	408	7,563	990	5,370	1,068	717	391	261		
September.....do....	19,034	410	7,658	991	5,438	1,293	744	392	253		
October.....do....	19,514	409	7,826	975	5,445	1,329	913	384	251		
November.....do....	19,372	407	7,747	966	5,410	1,343	870	385	260		
December.....do....	19,475	398	7,846	977	5,447	1,319	888	385	252		
Other employees <sup>2</sup> .....do....	1,852	30	595	103	493	92	73	33	25		
Proprietors and firm members.....do....	777	29	483	22	8	32	104	57	3		
Performing manual labor.....do....	561	21	375	5	5	14	97	5	2		
Man-hours worked by production, development, and exploration workers, total.....1,000..	33,129	745	12,276	2,223	9,527	2,188	1,297	677	495		
At mines, total.....do....	29,710	745	12,276	1,859	8,267	1,936	1,203	4	-		
Underground.....do....	24,008	-	11,648	-	7,643	1,827	1,112	-	-		
Strip-pits, auger mines, and dredges.....do....	3,217	649	-	1,236	-	-	-	-	-		
Surface (including mine shops and yards).....do....	2,485	96	628	623	624	109	91	-	-		
At preparation plants.....do....	3,419	-	-	364	1,260	252	94	677	495		
Man-hours spent on development and exploration work (included above).....do....	482	-	334	7	2	80	41	2	4		
Principal expenses designated below, total <sup>1</sup> .....\$1,000..	229,635	7,112	46,735	17,398	52,694	10,772	4,279	42,680	22,238		
Wages of production, development, and exploration workers.....do....	90,534	2,258	28,013	8,447	29,821	5,066	2,227	1,986	1,348		
Salaries of all other employees <sup>2</sup> .....do....	10,775	211	2,152	881	3,717	515	215	234	152		
Supplies.....do....	47,624	3,639	11,982	6,096	-	22,773	21,467	767	2,680		
Raw coal received for preparation.....do....	59,946	-	-	-	15,888	101	-	39,058	19,741		
Coal received for resale without further processing.....do....	2,063	-	25	100	-	(2)	(2)	-	(2)		
Purchased fuel.....do....	2,342	397	393	526	96	99	50	30	22		
Purchased electric energy.....do....	7,986	244	1,819	1,276	2,670	328	117	458	233		
Contract work.....do....	8,365	363	2,351	72	502	1,890	203	147	62		
Purchased machinery installed.....do....	34,940	1,503	2,515	3,523	10,676	1,178	472	210	219		
Capital expenditures, total.....do....	29,420	1,171	3,691	1,390	5,481	3,272	586	70	259		
Development and exploration of mineral property.....do....	788	52	43	19	336	197	38	19	5		
Preparation plants and other construction.....do....	6,677	68	1,109	198	690	2,026	141	33	53		
New machinery and equipment.....do....	19,669	950	2,070	930	3,645	931	265	18	195		
Used plant and equipment.....do....	2,286	101	469	243	810	118	142	-	6		
Energy used.....million kwh. equivalent..	2,196	102	225	244	269	43	16	162	50		
Coal produced and used at establishment.....1,000 short tons..	65	-	1	-	7	(2)	(2)	15	4		
Fuels purchased:											
Coal.....do....	2	-	2	(2)	-	(2)	-	-	-		
Distillate fuel oil.....1,000 barrels..	191	31	4	74	2	1	(2)	3	-		
Residual fuel oil.....do....	27	2	1	10	7	2	-	-	-		
Gas.....do....	54	-	28	-	4	-	-	14	4		
Gasoline.....1,000 gallons..	2,829	585	453	299	183	246	175	37	56		
Other fuels.....\$1,000..	139	1	132	-	-	-	6	-	-		
Undistributed.....do....	306	64	69	-	11	36	6	-	15		
Electric energy purchased.....million kwh..	1,078	8	119	88	188	20	7	36	15		
Electric energy generated and used.....do....	(2)	-	(2)	-	-	-	-	-	(2)		

TABLE 3B. Detailed Statistics, by Selected Geographic Areas and Types of Operation: 1963-Con.

Item	1211.--Bituminous coal--Continued									
	East South Central--Continued								Mountain	
	Tennessee			Alabama					Wyoming	
	All estab- lishments	Producing establishments		All estab- lishments	Mines only		Mines with mechanical--		All estab- lishments	Strip-pit mines with mechanical crushing
Mines only (under- ground)		Underground mines with mechanical crushing	Strip-pit only and auger only		Under- ground	Cleaning	Crushing, screening, or sizing only (under- ground)			
Establishments, total.....number..	271	201	10	193	23	101	27	32	18	8
With 0 to 19 employees.....do....	254	196	5	152	17	92	5	30	12	4
With 20 to 99 employees.....do....	14	5	3	30	6	9	12	1	6	4
With 100 employees and over.....do....	3	-	2	11	-	-	10	1	-	-
Including mines, culm banks, and dredges.....do....	265	201	10	190	22	101	27	32	18	8
Including preparation plants.....do....	37	-	10	69	-	-	27	32	12	8
Net production of coal, total.....1,000 short tons..	6,344	1,423	1,340	13,156	882	954	9,296	1,503	3,149	3,000
From underground operations.....do....	3,444	1,423	1,340	10,236	-	954	7,779	1,503	120	-
From strip-pit operations.....do....	2,656	-	-	2,780	882	-	1,422	-	3,029	3,000
From auger and dredge operations.....do....	244	-	-	140	-	-	95	-	-	-
Gross shipments of coal.....do....	(D)	1,433	1,354	13,986	934	995	9,488	1,503	3,149	2,999
Net shipments of coal, total.....do....	6,413	1,193	1,354	13,179	350	780	9,480	1,503	3,149	2,999
Raw coal sold for use without preparation.....do....	2,004	1,193	1,354	1,185	350	780	-	11	-	-
Prepared coal.....do....	4,409	-	-	11,994	-	-	9,480	1,492	3,149	2,999
Value of shipments and receipts, total.....\$1,000..	27,015	5,207	5,209	95,625	5,097	5,607	69,979	7,988	8,893	8,061
Raw coal transferred for preparation and resales.....do....	27,015	5,207	-	3,614	5,097	1,180	69,979	2	-	-
Net shipments and receipts, total.....do....	27,015	5,207	5,209	92,011	-	4,427	-	7,986	8,893	8,061
Coal net shipments.....do....	25,087	4,307	5,209	91,137	2,181	4,191	69,868	7,986	8,893	8,061
Other products and services.....do....	(D)	(D)	-	874	(D)	236	(D)	-	-	-
Value added in mining.....do....	20,146	4,050	4,199	67,753	3,769	4,367	50,504	6,350	6,185	5,578
Persons in industry, total <sup>1</sup> .....number..	2,078	809	424	5,785	305	788	3,862	670	314	191
Production, development, and exploration workers, average for the year.....do....	1,648	577	411	5,126	239	690	3,493	578	265	154
January.....do....	1,704	592	467	5,120	202	688	3,471	612	293	157
February.....do....	1,647	581	408	5,102	203	687	3,478	603	289	156
March.....do....	1,567	584	343	5,212	205	690	3,591	598	276	150
April.....do....	1,556	549	334	5,203	234	699	3,578	565	264	146
May.....do....	1,659	572	430	5,175	237	687	3,555	568	251	149
June.....do....	1,638	579	415	5,203	242	693	3,568	571	203	124
July.....do....	1,597	501	390	4,740	239	696	3,411	267	198	140
August.....do....	1,624	547	411	5,055	246	701	3,425	551	242	141
September.....do....	1,649	548	407	4,965	246	620	3,426	547	261	147
October.....do....	1,712	597	427	5,119	271	686	3,444	594	273	157
November.....do....	1,742	610	463	5,062	270	682	3,401	595	291	174
December.....do....	1,759	613	462	5,096	273	681	3,430	601	303	183
Other employees <sup>1</sup> .....do....	187	42	9	539	51	45	356	58	39	36
Proprietors and firm members.....do....	243	190	4	120	15	53	13	34	10	1
Performing manual labor.....do....	238	182	4	99	12	43	6	33	10	1
Man-hours worked by production, development, and exploration workers, total.....1,000..	2,785	840	704	8,772	398	939	6,205	1,035	402	282
At mines, total.....do....	2,643	840	673	8,136	398	939	5,647	1,004	333	226
Underground.....do....	1,855	813	639	6,261	-	884	4,567	810	78	-
Strip-pits, auger mines, and dredges.....do....	707	-	-	889	392	-	372	-	188	177
Surface (including mine shops and yards).....do....	81	27	34	986	6	55	708	194	67	49
At preparation plants.....do....	142	-	31	636	-	-	558	31	69	56
Man-hours spent on development and exploration work (included above).....do....	8	-	-	162	33	7	117	5	5	5
Principal expenses designated below, total <sup>1</sup> .....\$1,000..	15,719	3,151	3,317	58,775	2,861	3,797	42,542	4,852	4,321	3,680
Wages of production, development, and exploration workers.....do....	7,080	1,704	2,209	25,800	1,165	2,247	19,073	2,736	1,286	892
Salaries of all other employees <sup>1</sup> .....do....	964	90	67	4,602	264	122	3,580	428	199	173
Supplies.....do....	3,864	1,086	901	18,279	871	2,127	14,355	1,424	1,152	1,027
Raw coal received for preparation.....do....	1,917	-	-	4,677	-	-	1,413	-	-	-
Coal received for resale without further processing.....do....	-	1	-	-	4	(2)	-	2	-	-
Purchased fuel.....do....	579	15	19	775	251	49	404	6	143	141
Purchased electric energy.....do....	460	175	85	2,029	55	152	1,501	246	157	127
Contract work.....do....	855	80	36	2,613	251	100	2,216	10	1,384	1,320
Purchased machinery installed.....do....	2,368	107	176	4,169	590	57	2,723	326	115	101
Capital expenditures, total.....do....	3,174	307	207	4,670	694	245	3,137	376	243	233
Development and exploration of mineral property.....do....	166	3	8	352	12	3	294	40	7	7
Preparation plants and other construction.....do....	377	151	86	460	27	124	167	23	109	105
New machinery and equipment.....do....	2,062	136	96	2,984	519	107	2,050	243	123	118
Used plant and equipment.....do....	569	17	17	874	136	11	626	70	4	3
Energy used.....million kwh. equivalent..	222	17	53	400	52	18	288	24	62	60
Coal produced and used at establishment..1,000 short tons..	-	-	-	2	-	(2)	2	-	2	2
Fuels purchased:										
Coal.....do....	(2)	(2)	-	1	-	-	1	-	-	-
Distillate fuel oil.....1,000 barrels..	37	1	3	51	17	1	30	-	13	13
Residual fuel oil.....do....	3	-	-	-	-	-	-	-	-	-
Gas.....million cu. ft..	-	-	-	81	-	-	81	-	4	4
Gasoline.....1,000 gallons..	347	-	3	821	397	79	254	21	258	258
Other fuels.....\$1,000..	139	-	-	116	-	5	109	-	7	7
Undistributed.....do....	124	11	-	53	21	14	-	-	4	2
Electric energy purchased.....million kwh..	77	13	48	194	3	9	153	23	11	10
Electric energy generated and used.....do....	1	-	-	-	-	-	-	-	-	-

TABLE 3B. Detailed Statistics, by Selected Geographic Areas and Types of Operation: 1963 -Con.

Item	1211.--Bituminous coal--Continued						1212.--Lignite	
	Mountain--Continued				Pacific--Alaska			
	Colorado		Utah					
	All establishments	Producing underground mines with mechanical crushing	All establishments	Producing underground mines with preparation plants with mechanical cleaning	All establishments	Producing strip-pit mines with mechanical cleaning	All establishments	Producing strip-pit mines with mechanical crushing, screening, or sizing
Establishments, total.....number..	100	40	36	6	10	4	59	24
With 0 to 19 employees.....do....	84	30	20	1	7	1	53	18
With 20 to 99 employees.....do....	15	9	12	3	3	3	6	6
With 100 employees and over.....do....	1	1	4	2	-	-	-	-
Including mines, culm banks, and dredges.....do....	100	40	35	6	10	4	58	24
Including preparation plants.....do....	62	40	28	6	4	4	26	24
Net production of coal, total.....1,000 short tons..	4,022	2,284	4,322	1,898	858	848	4,989	4,649
From underground operations.....do....	3,184	2,284	4,322	1,898	-	-	14	-
From strip-pit operations.....do....	838	-	-	-	858	848	4,975	4,649
From auger and dredge operations.....do....	-	-	-	-	-	-	-	-
Gross shipments of coal.....do....	(D)	2,284	(D)	2,152	856	846	5,016	4,649
Net shipments of coal, total.....do....	3,972	(D)	4,379	2,152	856	846	4,984	4,649
Raw coal sold for use without preparation.....do....	277	23	134	-	-	-	365	47
Prepared coal.....do....	3,695	(D)	4,245	2,152	856	846	4,619	4,619
Value of shipments and receipts, total.....\$1,000..	24,033	16,813	39,213	15,456	5,894	5,815	14,112	12,992
Raw coal transferred for preparation and resales.....do....	-	-	-	-	-	-	131	-
Net shipments and receipts, total.....do....	24,033	16,813	39,213	15,456	5,894	5,815	13,981	12,992
Coal net shipments.....do....	23,513	-	30,473	15,258	5,894	5,815	13,640	12,651
Other products and services.....do....	(D)	-	(D)	(D)	-	-	341	341
Value added in mining.....do....	19,470	14,169	23,337	11,000	5,009	4,907	11,830	10,995
Persons in industry, total <sup>1</sup> .....number..	1,474	958	1,749	791	201	181	557	458
Production, development, and exploration workers, average for the year.....do....	1,242	848	1,556	729	171	159	441	374
January.....do....	1,360	959	1,829	789	154	153	481	414
February.....do....	1,374	981	1,822	781	167	158	476	409
March.....do....	1,311	931	1,675	734	170	161	469	402
April.....do....	1,227	861	1,494	738	167	158	427	358
May.....do....	1,240	847	1,457	734	157	148	431	362
June.....do....	1,168	806	1,432	677	165	156	410	341
July.....do....	1,017	698	1,454	671	182	173	401	339
August.....do....	1,105	726	1,495	717	184	170	402	334
September.....do....	1,184	779	1,567	723	172	156	413	351
October.....do....	1,288	855	1,582	732	175	159	434	368
November.....do....	1,312	890	1,597	732	172	156	465	389
December.....do....	1,357	903	1,607	744	163	155	463	397
Other employees <sup>2</sup> .....do....	132	68	170	60	23	21	71	70
Proprietors and firm members.....do....	100	42	23	2	7	1	45	14
Performing manual labor.....do....	86	35	17	2	7	1	45	13
Man-hours worked by production, development, and exploration workers, total.....1,000..	2,205	1,510	2,502	1,116	445	424	884	739
At mines, total.....do....	2,031	1,425	2,241	1,019	342	321	695	557
Underground.....do....	1,547	1,211	1,812	832	-	-	11	-
Strip-pits, auger mines, and dredges.....do....	133	-	30	-	226	217	502	392
Surface (including mine shops and yards).....do....	351	214	399	187	116	104	182	165
At preparation plants.....do....	174	85	261	97	103	103	189	182
Man-hours spent on development and exploration work (included above).....do....	14	2	74	-	20	-	40	40
Principal expenses designated below, total <sup>1</sup> .....\$1,000..	13,357	8,169	26,213	8,867	3,450	3,175	5,339	4,624
Wages of production, development, and exploration workers.....do....	7,214	4,906	8,880	3,977	1,913	1,849	2,245	1,980
Salaries of all other employees <sup>2</sup> .....do....	904	521	1,061	398	313	290	515	510
Supplies.....do....	3,516	2,179	14,997	3,980	895	763	1,788	1,641
Raw coal received for preparation.....do....	-	-	70	-	-	-	-	-
Coal received for resale without further processing.....do....	-	-	-	-	-	-	-	-
Purchased fuel.....do....	83	15	119	29	201	183	200	144
Purchased electric energy.....do....	602	377	864	434	57	57	304	301
Contract work.....do....	1,038	171	222	49	71	33	287	48
Purchased machinery installed.....do....	1,635	609	1,382	343	567	506	4,336	2,749
Capital expenditures, total.....do....	2,311	710	1,778	379	906	634	4,633	2,886
Development and exploration of mineral property.....do....	27	9	241	-	271	75	10	10
Preparation plants and other construction.....do....	478	41	33	11	99	96	247	56
New machinery and equipment.....do....	1,421	577	1,115	282	402	393	4,316	2,760
Used plant and equipment.....do....	385	83	389	86	134	70	60	60
Energy used.....million kwh. equivalent.	99	76	172	85	78	73	140	110
Coal produced and used at establishment.....1,000 short tons.	7	7	10	6	4	4	6	5
Fuels purchased:								
Coal.....do....	(2)	(2)	(2)	(2)	(2)	-	-	-
Distillate fuel oil.....1,000 barrels..	5	1	7	1	21	21	22	22
Residual fuel oil.....do....	1	-	6	-	-	-	4	4
Gas.....million cu. ft..	3	3	-	-	-	-	10	10
Gasoline.....1,000 gallons..	73	32	165	100	73	73	334	204
Other fuels.....\$1,000.	3	-	3	-	10	10	4	-
Undistributed.....do....	5	-	19	-	19	1	17	7
Electric energy purchased.....million kwh.	29	18	61	34	2	2	14	14
Electric energy generated and used.....do....	(2)	(2)	-	-	15	15	-	-
Horsepower rating of power equipment (prime movers and elec-								

TABLE 3B. Detailed Statistics, by Selected Geographic Areas and Types of Operation: 1963-Con.

Footnotes for Table 3B-12A

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
 (Z) Less than one-half of the unit of measure.  
<sup>1</sup>The "All establishments" and "All producing establishments" totals for the United States and by State includes data for employees at separately reported central offices and related facilities. These were not distributed by detailed types of operation.  
<sup>2</sup>The figure for resales is included with the figure for cost of supplies.  
<sup>3</sup>Includes data for production in other industries. The combined tonnage for such production in Pennsylvania and Indiana was 48 thousand tons.

TABLE 4A. Selected Statistics, by Employment Size of Establishment: 1963

Item	Establish- ments, total	Establishments with an average of--									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1211.—BITUMINOUS COAL											
Establishments.....number..	6,115	2,974	1,070	928	649	202	191	87	13	1	-
All employees:											
Total.....number..	<sup>1</sup> 132,046	4,785	7,172	12,497	19,626	14,067	29,653	30,624	<u>9,637</u>	(D)	-
Payroll.....\$1,000..	<sup>1</sup> 752,491	15,294	23,633	46,696	87,078	82,112	198,074	205,708	<u>62,092</u>	(D)	-
Production, development, and exploration workers:											
Total.....number..	116,975	4,707	6,268	11,501	17,980	12,885	27,149	27,810	<u>8,675</u>	(D)	-
Man-hours.....1,000..	214,421	6,807	9,823	19,454	32,181	24,920	52,698	52,758	<u>15,780</u>	(D)	-
Wages.....\$1,000..	642,338	15,082	21,212	43,069	78,989	74,088	177,021	179,637	<u>53,240</u>	(D)	-
Value added in mining.....do....	1,578,078	45,769	55,479	103,995	189,654	189,839	444,836	427,373	<u>121,133</u>	(D)	-
Value of shipments and receipts.....do....	2,358,326	77,458	99,879	161,697	311,426	323,815	635,490	586,997	<u>161,574</u>	(D)	-
Capital expenditures.....do....	210,835	15,916	16,079	17,857	37,237	23,511	63,572	32,202	<u>4,461</u>	(D)	-
Producing establishments, by type of operation, total.....number..	6,078	2,950	1,061	925	648	202	191	87	13	1	-
Mines only:											
Strip-pit.....do....	570	305	106	99	46	11	3	-	-	-	-
Underground.....do....	3,938	2,308	697	555	306	35	28	7	2	-	-
Auger.....do....	97	66	20	7	4	-	-	-	-	-	-
Strip-pit and underground.....do....	16	4	2	3	5	2	-	-	-	-	-
Strip-pit and auger.....do....	64	15	14	22	10	3	-	-	-	-	-
Other combinations.....do....	11	2	-	2	4	1	-	1	1	-	-
Mines with preparation plants:											
With mechanical cleaning:											
Strip-pit.....do....	108	8	7	10	28	28	25	2	-	-	-
Underground.....do....	301	5	6	14	41	53	105	68	8	1	-
Dredge.....do....	4	3	1	-	-	-	-	-	-	-	-
Strip-pit and underground.....do....	17	-	-	1	4	3	5	3	1	-	-
Strip-pit and auger.....do....	15	-	-	2	4	9	-	-	-	-	-
Other combinations.....do....	16	-	-	1	3	2	6	3	1	-	-
With mechanical crushing, screening, or sizing only:											
Strip-pit:											
With crushing.....do....	185	22	32	63	53	13	2	-	-	-	-
With screening and sizing only.....do....	48	24	7	7	8	2	-	-	-	-	-
Underground:											
With crushing.....do....	236	61	41	40	57	22	13	2	-	-	-
With screening and sizing only.....do....	193	54	71	44	20	2	2	-	-	-	-
Auger:											
With crushing.....do....	14	7	2	4	1	-	-	-	-	-	-
With screening and sizing only.....do....	4	1	2	1	-	-	-	-	-	-	-
Strip-pit and underground:											
With crushing.....do....	8	2	-	2	3	1	-	-	-	-	-
With screening and sizing only.....do....	3	-	1	-	2	-	-	-	-	-	-
Strip-pit and auger.....do....	48	-	6	15	20	7	-	-	-	-	-
Other combinations.....do....	8	1	-	1	5	1	-	-	-	-	-
Preparation plants only:											
Mechanical cleaning.....do....	73	15	19	14	15	7	2	1	-	-	-
Mechanical crushing.....do....	88	41	25	14	8	-	-	-	-	-	-
Mechanical screening and sizing only.....do....	13	6	2	4	1	-	-	-	-	-	-
1212.—LIGNITE											
Establishments.....number..	59	42	6	5	3	3	-	-	-	-	-
All employees:											
Total.....do....	512	53	36	90	110	223	-	-	-	-	-
Payroll.....\$1,000..	2,760	185	183	429	<u>1,963</u>	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	441	49	35	78	94	185	-	-	-	-	-
Man-hours.....1,000..	884	103	80	168	<u>533</u>	(D)	-	-	-	-	-
Wages.....\$1,000..	2,245	166	178	340	<u>1,561</u>	(D)	-	-	-	-	-
Value added in mining.....do....	11,830	529	275	1,859	<u>9,167</u>	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	14,112	758	383	2,783	<u>10,186</u>	(D)	-	-	-	-	-
Capital expenditures.....do....	4,633	( <sup>2</sup> )	34	17	( <sup>2</sup> )	( <sup>2</sup> )	-	-	-	-	-

(See footnotes at end of table.)

TABLE 4A Selected Statistics, by Employment Size of Establishment: 1963—Continued

Item	Establishments, total	Establishments with an average of--									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1212.—LIGNITE—Continued											
Producing establishments, by type of operation, total.....number..	57	40	6	5	3	3	-	-	-	-	-
Mines only:											
Strip-pit.....do....	22	17	4	1	-	-	-	-	-	-	-
Underground.....do....	9	9	-	-	-	-	-	-	-	-	-
Mines with preparation plants:											
Strip-pit:											
With mechanical crushing.....do....	20	8	2	4	3	3	-	-	-	-	-
With mechanical screening or sizing only.....do....	4	4	-	-	-	-	-	-	-	-	-
Underground, with mechanical screening or sizing only.....do....	1	1	-	-	-	-	-	-	-	-	-
Preparation plant only.....do....	1	1	-	-	-	-	-	-	-	-	-
1213.—BITUMINOUS COAL MINING SERVICES											
Establishments.....number..	131	57	31	26	13	4	-	-	-	-	-
All employees:											
Total.....do....	1,304	113	196	352	398	245	-	-	-	-	-
Payroll.....\$1,000..	7,012	454	857	1,863	<u>3,838</u>	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,213	110	183	328	376	216	-	-	-	-	-
Man-hours.....1,000..	2,337	211	338	696	<u>1,092</u>	(D)	-	-	-	-	-
Wages.....\$1,000..	6,372	451	799	1,701	<u>3,421</u>	(D)	-	-	-	-	-
Value added in mining.....do....	16,780	1,429	2,387	4,479	<u>8,485</u>	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	23,981	1,781	3,080	6,634	<u>12,486</u>	(D)	-	-	-	-	-
Capital expenditures.....do....	2,872	( <sup>2</sup> )	488	919	( <sup>2</sup> )	( <sup>2</sup> )	-	-	-	-	-
Establishments, by principal type of service, total.....number..	131	57	31	26	13	4	-	-	-	-	-
Stripping overburden and strip mining coal.....do....	65	19	17	19	7	3	-	-	-	-	-
Auger mining coal.....do....	25	14	3	4	4	-	-	-	-	-	-
Prospect, test, and other drilling.....do....	16	11	3	1	1	-	-	-	-	-	-
Exploration work, including geophysical surveying.....do....	13	5	6	1	1	-	-	-	-	-	-
Other services.....do....	12	8	2	1	-	1	-	-	-	-	-

Note: See appendix A for explanation of terms used.

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.

<sup>1</sup>Includes figures for separately reported central offices and related facilities. These were not distributed by size of establishment.<sup>2</sup>Not shown to avoid disclosure of figures for individual companies.

**TABLE 4B. Number of Establishments Classified by Employment Size, by Geographic Areas: 1963**

Ind. code	Industry and geographic area	Establishments, total	Establishments with an average of--									
			No employees	1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
12	BITUMINOUS COAL AND LIGNITE MINING, TOTAL.	6,305	853	2,220	1,107	959	665	209	191	87	13	1
1211	Bituminous coal.....	6,115	833	2,141	1,070	928	649	202	191	87	13	1
1212	Lignite.....	59	15	27	6	5	3	3	-	-	-	-
1213	Bituminous coal mining services.....	131	5	52	31	26	13	4	-	-	-	-
1211	Middle Atlantic (Pennsylvania), total.....	1,214	168	491	222	142	104	43	20	21	2	1
1211	Bituminous coal.....	1,174	168	479	211	130	100	42	20	21	2	1
1213	Bituminous coal mining services.....	40	-	12	11	12	4	1	-	-	-	-
1211	East North Central, total.....	575	49	178	79	99	78	34	43	12	3	-
1211	Bituminous coal.....	554	48	167	76	96	75	34	43	12	3	-
1213	Bituminous coal mining services.....	21	1	11	3	3	3	-	-	-	-	-
1211	Ohio, total.....	397	34	141	62	77	51	16	11	5	-	-
1211	Bituminous coal.....	382	33	135	60	74	48	16	11	5	-	-
1213	Bituminous coal mining services.....	15	1	6	2	3	3	-	-	-	-	-
1211	Indiana, total.....	72	7	21	12	12	3	6	9	2	-	-
1211	Bituminous coal.....	69	7	19	11	12	3	6	9	2	-	-
1213	Bituminous coal mining services.....	3	-	2	1	-	-	-	-	-	-	-
1211	Illinois, total.....	106	8	16	5	10	24	12	23	5	3	-
1211	Bituminous coal.....	103	8	13	5	10	24	12	23	5	3	-
1213	Bituminous coal mining services.....	3	-	3	-	-	-	-	-	-	-	-
1211	West North Central, total.....	132	24	54	25	12	9	6	2	-	-	-
1211	Bituminous coal.....	85	14	31	18	10	6	4	2	-	-	-
1212	Lignite.....	44	10	22	5	2	3	2	-	-	-	-
1213	Bituminous coal mining services.....	3	-	1	2	-	-	-	-	-	-	-
1211	Iowa, total.....	39	3	14	13	6	3	-	-	-	-	-
1211	Bituminous coal.....	36	3	13	11	6	3	-	-	-	-	-
1213	Bituminous coal mining services.....	3	-	1	2	-	-	-	-	-	-	-
1211	Missouri (bituminous coal).....	35	8	12	6	3	2	3	1	-	-	-
1212	North Dakota (lignite).....	43	10	22	4	2	3	2	-	-	-	-
1212	South Dakota (lignite).....	1	-	1	-	-	-	-	-	-	-	-
1211	Kansas (bituminous coal).....	14	3	6	1	1	1	1	1	-	-	-
1211	South Atlantic, total.....	2,428	228	840	469	440	261	67	82	36	5	-
1211	Bituminous coal.....	2,390	225	826	463	431	257	65	82	36	5	-
1213	Bituminous coal mining services.....	38	3	14	6	9	4	2	-	-	-	-
1211	Maryland (bituminous coal).....	64	6	36	9	9	3	1	-	-	-	-
1211	Virginia, total.....	775	37	230	191	188	98	21	8	1	1	-
1211	Bituminous coal.....	769	37	228	191	187	97	19	8	1	1	-
1213	Bituminous coal mining services.....	6	-	2	-	1	1	2	-	-	-	-
1211	West Virginia, total.....	1,586	183	574	268	243	160	45	74	35	4	-
1211	Bituminous coal.....	1,554	180	562	262	235	157	45	74	35	4	-
1213	Bituminous coal mining services.....	32	3	12	6	8	3	-	-	-	-	-
1211	Georgia (bituminous coal).....	3	2	-	1	-	-	-	-	-	-	-
1211	East South Central, total.....	1,674	329	548	273	242	182	44	37	17	2	-
1211	Bituminous coal.....	1,658	329	542	267	240	180	44	37	17	2	-
1213	Bituminous coal mining services.....	16	-	6	6	2	2	-	-	-	-	-
1211	Kentucky, total.....	1,203	182	413	211	175	148	32	30	11	1	-
1211	Bituminous coal.....	1,194	182	409	207	174	148	32	30	11	1	-
1213	Bituminous coal mining services.....	9	-	4	4	1	-	-	-	-	-	-
1211	Tennessee, total.....	272	113	79	30	33	10	4	3	-	-	-
1211	Bituminous coal.....	271	113	78	30	33	10	4	3	-	-	-
1213	Bituminous coal mining services.....	3	-	1	2	-	-	-	-	-	-	-
1211	Alabama, total.....	199	34	56	32	34	24	8	4	6	1	-
1211	Bituminous coal.....	193	34	55	30	33	22	8	4	6	1	-
1213	Bituminous coal mining services.....	4	-	1	-	1	2	-	-	-	-	-
1211	West South Central, total.....	47	11	17	3	8	4	3	1	-	-	-
1211	Bituminous coal.....	40	11	13	3	6	4	2	1	-	-	-
1212	Lignite.....	3	-	-	-	2	-	1	-	-	-	-
1213	Bituminous coal mining services.....	4	-	4	-	-	-	-	-	-	-	-
1211	Arkansas, total.....	18	4	7	1	5	1	-	-	-	-	-
1211	Bituminous coal.....	17	4	6	1	5	1	-	-	-	-	-
1213	Bituminous coal mining services.....	1	-	1	-	-	-	-	-	-	-	-
1211	Oklahoma, total.....	26	7	10	2	1	3	2	1	-	-	-
1211	Bituminous coal.....	23	7	7	2	1	3	2	1	-	-	-
1213	Bituminous coal mining services.....	3	-	3	-	-	-	-	-	-	-	-
1212	Texas (lignite).....	3	-	-	-	2	-	1	-	-	-	-

See footnotes at end of table.

TABLE 4B. Number of Establishments Classified by Employment Size, by Geographic Areas: 1963—Continued

Ind. code	Industry and geographic area	Establishments, total	Establishments with an average of—									
			No employees	1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
12	BITUMINOUS COAL AND LIGNITE MINING—Con.											
	Mountain, total.....	213	39	85	32	15	25	10	5	1	1	-
1211	Bituminous coal.....	195	34	77	29	14	25	9	5	1	1	-
1212	Lignite.....	11	5	5	-	1	-	-	-	-	-	-
1213	Bituminous coal mining services.....	7	-	3	3	-	-	1	-	-	-	-
	Montana, total.....	30	9	16	4	1	-	-	-	-	-	-
1211	Bituminous coal.....	19	4	11	4	-	-	-	-	-	-	-
1212	Lignite.....	11	5	5	-	1	-	-	-	-	-	-
	Wyoming, total.....	21	3	5	4	2	4	3	-	-	-	-
1211	Bituminous coal.....	18	3	5	2	2	4	2	-	-	-	-
1213	Bituminous coal mining services.....	3	-	-	2	-	-	1	-	-	-	-
1211	Colorado (bituminous coal).....	100	19	46	12	7	10	5	-	1	-	-
	New Mexico, total.....	21	2	11	5	-	1	-	2	-	-	-
1211	Bituminous coal.....	18	2	9	4	-	1	-	2	-	-	-
1213	Bituminous coal mining services.....	3	-	2	1	-	-	-	-	-	-	-
	Arizona, total.....	5	2	3	-	-	-	-	-	-	-	-
1211	Bituminous coal.....	4	2	2	-	-	-	-	-	-	-	-
1213	Bituminous coal mining services.....	1	-	1	-	-	-	-	-	-	-	-
1211	Utah (bituminous coal).....	36	4	4	7	5	10	2	3	-	1	-
	Pacific, total.....	22	5	7	4	1	2	2	1	-	-	-
1211	Bituminous coal.....	19	4	6	3	1	2	2	1	-	-	-
1212	Lignite.....	1	-	-	1	-	-	-	-	-	-	-
1213	Bituminous coal mining services.....	2	1	1	-	-	-	-	-	-	-	-
	Washington, total.....	11	2	5	1	1	1	-	1	-	-	-
1211	Bituminous coal.....	9	1	4	1	1	1	-	1	-	-	-
1213	Bituminous coal mining services.....	2	1	1	-	-	-	-	-	-	-	-
1212	California (lignite).....	1	-	-	1	-	-	-	-	-	-	-
1211	Alaska (bituminous coal).....	10	3	2	2	-	1	2	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts and Net Shipments of Primary Products: 1963 and 1958

(In thousands of dollars)

Ind. code	Industry and year	Value of shipments and receipts of establishments classified in the industry					Value of net shipments of primary products of the industry shipped by establishments in all industries or receipts for primary services by all industries		
		Total	Primary products or services	Secondary products	Miscellaneous receipts for services	Products purchased and resold without further processing	Total (produced or received in all industries)	Produced or received in this industry	Produced or received in other industries
1211	Bituminous coal.....1963..	2,358,326	2,342,815	2,303	1,816	<sup>1</sup> 11,392	2,059,734	2,059,046	688
	.....1958..	2,398,224	2,371,238	3,119	1,068	<sup>1</sup> 22,799	2,055,804	2,055,369	435
1212	Lignite.....1963..	14,112	13,771	(D)	(D)	-	13,640	13,640	-
	.....1958..	11,035	11,021	-	14	-	11,021	11,021	-
1213	Bituminous coal mining services.....1963..	23,981	23,035	-	540	406	23,220	23,035	185
	.....1958..	21,649	21,374	-	225	50	21,537	21,374	163 <sup>1</sup>

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>For 1963, represents 2,901 thousand short tons of coal purchased and resold without further processing; for 1958 the comparable figure was 5,485 thousand short tons.

(For net production of coal by State and method of mining, see tables 2A and 3. For net shipments of coal by type of operation, see table 3B)

es at end of table.



**TABLE 6A. Primary Products and Services Performed in All Industries, by Geographic Areas: 1963 and 1958--Continued**

Type of service and geographic area	1963		1958	
	Raw coal mined (1,000 short tons)	Receipts for services (\$1,000)	Raw coal mined (1,000 short tons)	Receipts for services (\$1,000)
<b>BITUMINOUS COAL AND LIGNITE MINING SERVICES</b>				
United States, total.....	6,614	23,220	6,327	21,537
Stripping overburden and strip mining coal not for own account.....	4,965	13,988	5,112	15,765
Auger mining coal not for own account.....	1,649	4,155	1,215	3,358
Prospect, test, and other drilling (including blasting)....	(X)	1,588	(X)	842
Exploration work, including geophysical surveying.....	(X)	1,708	(X)	1,572
Other services, such as shaft sinking, tunneling, rock-work, timbering, clay tamping, and backfilling.....	(X)	1,781	(X)	
Middle Atlantic (Pennsylvania), total.....	1,612	7,331	2,008	8,039
Stripping overburden and strip mining coal not for own account.....	1,404	4,581	1,969	6,176
Auger mining coal not for own account.....	208	416	39	1,863
Other services.....	(X)	2,334	(X)	
South Atlantic, total.....	1,697	8,918	2,464	7,923
Stripping overburden and strip mining coal not for own account.....	740	5,149	1,730	5,642
Auger mining coal not for own account.....	957	2,527	734	1,971
Other services.....	(X)	1,242	(X)	310
Virginia.....	489	4,438	838	1,967
West Virginia.....	1,208	4,480	1,540	5,614
East South Central.....	640	1,897	1,034	3,196
Stripping overburden and strip mining coal not for own account.....	473	1,044	685	2,072
Auger mining coal not for own account.....	167	431	349	1,114
Other services.....	(X)	422	(X)	10
West.....	(D)	1,793	(D)	796

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies.  
(NA) Not available. (X) Not applicable.

<sup>1</sup>Represents raw coal for use without preparation plus prepared coal.

<sup>2</sup>Figures for receipts of raw coal for mechanical crushing, screening, and sizing are combined with those for receipts for mechanical cleaning.

<sup>3</sup>Figures for coal received from other establishments are included with those for coal mined and prepared at same establishments.

**TABLE 6B. Product Classes—Indexes of Production and Unit Value for Primary Products Shipped by All Producers: 1963 and 1958**

Product code	Product and year	Indexes (1954 = 100)	
		Production	Unit value
12	Bituminous coal and lignite mining.....1963...	120	98
	.....1958...	108	108
1211	Bituminous coal (net shipments).....1963...	119	98
	.....1958...	108	108
	Raw bituminous coal (gross shipments).....1963...	123	98
	.....1958...	112	112
	Prepared bituminous coal.....1963...	122	97
	.....1958...	111	107
1212	Lignite (net shipments).....1963...	118	112
	.....1958...	100	107
	Raw lignite (gross shipments).....1963...	104	103
	.....1958...	96	96
	Prepared lignite.....1963...	119	113
	.....1958...	100	108
1213	Bituminous coal mining services.....1963...	134	99
	.....1958...	113	108

TABLE 6C. Shipments of Primary Products Distributed by Value Per Short Ton, by Geographic Areas: 1963

Item and geographic area	Total	Shipments by average value per short ton f.o.b. mine or plant of—													
		Less than \$2.05	\$2.05 to \$2.29	\$2.30 to \$2.59	\$2.60 to \$2.94	\$2.95 to \$3.34	\$3.35 to \$3.79	\$3.80 to \$4.29	\$4.30 to \$4.84	\$4.85 to \$5.44	\$5.45 to \$6.14	\$6.15 to \$6.94	\$6.95 to \$7.84	\$7.85 to \$9.99	\$10.00 and over
BITUMINOUS COAL															
RAW COAL SHIPPED (INCLUDING INTERPLANT TRANSFERS)															
For Use Without Preparation															
United States, total:															
Quantity.....1,000 short tons..	65,619	1,496	319	967	6,889	14,613	16,418	13,342	5,663	3,782	1,067	881	82	100	(D)
Percent of total.....	100.0	2.3	0.5	1.5	10.5	22.3	25.0	20.3	8.6	5.8	1.6	1.3	0.1	0.2	(D)
Value.....\$1,000..	240,920	2,560	698	2,357	19,184	46,142	57,936	54,106	25,195	19,454	6,114	5,705	597	872	(D)
Percent of total.....	100.0	1.1	0.3	1.0	8.0	19.1	24.0	22.5	10.5	8.1	2.5	2.4	0.2	0.3	(D)
Middle Atlantic (Pennsylvania):															
Quantity.....1,000 short tons..	10,315	161	(D)	243	642	1,834	1,493	3,245	938	1,429	216	99	15	(D)	-
Percent of total.....	100.0	1.5	(D)	2.4	6.2	17.8	14.5	31.5	9.1	13.9	2.1	0.9	0.1	(D)	-
Value.....\$1,000..	40,293	296	(D)	582	1,768	5,703	5,374	12,929	4,288	7,372	1,235	636	110	(D)	-
Percent of total.....	100.0	0.7	(D)	1.4	4.4	14.2	13.3	32.1	10.6	18.3	3.1	1.6	0.3	(D)	-
East North Central:															
Quantity.....1,000 short tons..	10,362	321	(D)	380	913	2,392	4,396	327	1,480	67	32	54	(D)	-	(D)
Percent of total.....	100.0	3.1	(D)	3.7	8.8	23.1	42.4	3.2	14.3	0.6	0.3	0.5	(D)	-	(D)
Value.....\$1,000..	35,274	636	(D)	934	2,599	7,362	15,126	1,328	6,414	346	187	342	(D)	-	(D)
Percent of total.....	100.0	1.8	(D)	2.6	7.4	20.9	42.9	3.8	18.2	1.0	0.5	0.9	(D)	-	(D)
West North Central:															
Quantity.....1,000 short tons..	1,152	-	-	-	-	33	897	100	52	49	16	5	(D)	-	-
Percent of total.....	100.0	-	-	-	-	2.9	77.9	8.7	4.5	4.2	1.4	0.2	(D)	-	-
Value.....\$1,000..	4,278	-	-	-	-	106	3,146	396	245	259	89	37	(D)	-	-
Percent of total.....	100.0	-	-	-	-	2.5	73.5	9.3	5.7	6.0	2.1	0.9	(D)	-	-
South Atlantic:															
Quantity.....1,000 short tons..	23,560	847	42	216	2,311	(D)	7,907	7,460	2,846	908	465	547	11	(D)	-
Percent of total.....	100.0	3.6	0.2	0.9	9.8	(D)	33.6	31.7	12.1	3.8	2.0	2.3	-	-	-
Value.....\$1,000..	91,402	1,432	94	524	7,011	(D)	28,180	30,618	12,664	4,626	2,618	3,553	82	(D)	-
Percent of total.....	100.0	1.6	0.1	0.6	7.6	(D)	30.8	33.5	13.8	5.1	2.9	3.9	0.1	-	-
East South Central:															
Quantity.....1,000 short tons..	19,197	291	152	128	4,372	8,476	1,604	2,149	296	1,297	253	126	-	53	-
Percent of total.....	100.0	1.5	0.8	0.7	22.8	44.1	8.3	11.2	1.5	6.8	1.3	0.7	-	0.3	-
Value.....\$1,000..	65,391	466	332	317	12,120	27,120	5,652	8,593	1,352	6,685	1,495	816	-	443	-
Percent of total.....	100.0	0.7	0.5	0.5	18.5	41.5	8.6	13.2	2.1	10.2	2.3	1.2	-	0.7	-
West South Central:															
Quantity.....1,000 short tons..	90	-	-	-	-	16	-	(D)	4	(D)	22	6	31	11	(D)
Percent of total.....	100.0	-	-	-	-	17.8	-	(D)	4.5	(D)	24.4	6.7	34.4	12.2	(D)
Value.....\$1,000..	571	-	-	-	-	54	-	(D)	23	(D)	130	38	223	103	(D)
Percent of total.....	100.0	-	-	-	-	9.5	-	(D)	4.0	(D)	22.8	6.7	39.0	18.0	(D)
Mountain:															
Quantity.....1,000 short tons..	924	-	-	-	517	(D)	121	55	79	(D)	59	48	24	21	-
Percent of total.....	100.0	-	-	-	56.0	(D)	13.1	5.9	8.5	(D)	6.4	5.2	2.6	2.3	-
Value.....\$1,000..	3,576	-	-	-	1,499	(D)	458	220	375	(D)	337	314	180	193	-
Percent of total.....	100.0	-	-	-	42.0	(D)	12.8	6.1	10.5	(D)	9.4	8.8	5.0	5.4	-
Pacific:															
Quantity.....1,000 short tons..	19	3	-	-	-	-	-	(D)	-	-	4	-	-	12	-
Percent of total.....	100.0	15.8	-	-	-	-	-	(D)	-	-	21.1	-	-	63.1	-
Value.....\$1,000..	135	8	-	-	-	-	-	(D)	-	-	23	-	-	104	-
Percent of total.....	100.0	6.0	-	-	-	-	-	(D)	-	-	17.0	-	-	77.0	-
For Preparation at Other Establishments															
United States:															
Quantity.....1,000 short tons..	81,372	5,106	3,711	5,656	8,985	15,185	13,540	12,633	8,447	4,615	1,638	1,856	-	(D)	(D)
Percent of total.....	100.0	6.3	4.6	6.9	11.0	18.7	16.6	15.5	10.4	5.7	2.0	2.3	-	(D)	(D)
Value.....\$1,000..	283,769	9,629	8,224	13,828	24,632	46,695	47,017	49,989	38,138	23,690	9,340	12,587	-	(D)	(D)
Percent of total.....	100.0	3.4	2.9	4.9	8.7	16.4	16.6	17.6	13.4	8.3	3.3	4.5	-	(D)	(D)
Middle Atlantic (Pennsylvania):															
Quantity.....1,000 short tons..	18,331	154	(D)	1,191	3,942	2,175	1,220	4,717	(D)	3,499	181	1,252	-	-	-
Percent of total.....	100.0	0.8	(D)	6.5	21.5	11.9	6.7	25.7	(D)	19.1	1.0	6.8	-	-	-
Value.....\$1,000..	72,626	320	(D)	2,960	10,912	6,674	4,246	20,043	(D)	18,033	1,023	8,415	-	-	-
Percent of total.....	100.0	0.4	(D)	4.1	15.0	9.2	5.9	27.6	(D)	24.8	1.4	11.6	-	-	-
East North Central:															
Quantity.....1,000 short tons..	12,802	4,531	2,306	2,642	1,707	1,249	(D)	369	(D)	-	-	-	-	-	-
Percent of total.....	100.0	35.4	18.0	20.6	13.3	9.8	(D)	2.9	(D)	-	-	-	-	-	-
Value.....\$1,000..	30,539	8,739	5,191	6,382	4,656	4,103	(D)	1,468	(D)	-	-	-	-	-	-
Percent of total.....	100.0	28.6	17.0	20.9	15.3	13.4	(D)	4.8	(D)	-	-	-	-	-	-
South Atlantic:															
Quantity.....1,000 short tons..	30,067	575	(D)	1,344	1,654	8,021	6,420	6,227	4,784	802	240	(D)	-	(D)	-
Percent of total.....	100.0	1.9	(D)	4.5	5.5	26.7	21.4	20.7	15.9	2.7	0.7	(D)	-	(D)	-
Value.....\$1,000..	109,501	1,184	(D)	3,332	4,581	24,916	22,698	25,094	22,072	4,101	1,523	(D)	-	(D)	-
Percent of total.....	100.0	1.1	(D)	3.0	4.2	22.8	20.7	22.9	20.2	3.7	1.4	(D)	-	(D)	-

See footnotes at end of table.

TABLE 6C. Shipments of Primary Products Distributed by Value Per Short Ton,  
by Geographic Areas: 1963—Continued

Item and geographic area	Total	Shipments by average value per short ton f.o.b. mine or plant of <sup>1</sup> —													
		Less than \$2.05	\$2.05 to \$2.29	\$2.30 to \$2.59	\$2.60 to \$2.94	\$2.95 to \$3.34	\$3.35 to \$3.79	\$3.80 to \$4.29	\$4.30 to \$4.84	\$4.85 to \$5.44	\$5.45 to \$6.14	\$6.15 to \$6.94	\$6.95 to \$7.84	\$7.85 to \$9.99	\$10.00 and over
BITUMINOUS COAL—Continued															
PREPARED COAL SHIPPED (INCLUDING INTERPLANT TRANSFERS)															
<u>Mechanically cleaned</u>															
United States:															
Quantity.....1,000 short tons..	295,225	-	-	3,535	(D)	15,613	42,363	63,251	56,358	32,818	25,735	35,946	10,923	8,683	(D)
Percent of total.....	100.0	-	-	1.2	(D)	5.3	14.4	21.4	19.1	11.1	8.7	12.2	3.7	2.9	(D)
Value.....\$1,000..	1,428,452	-	-	10,050	(D)	50,079	151,057	258,185	254,060	167,470	146,633	236,137	78,316	76,465	(D)
Percent of total.....	100.0	-	-	0.7	(D)	3.5	10.6	18.1	17.8	11.7	10.3	16.5	5.5	5.3	(D)
Middle Atlantic (Pennsylvania):															
Quantity.....1,000 short tons..	44,815	-	-	404	(D)	(D)	3,006	3,129	6,315	8,303	3,551	15,725	4,382	(D)	-
Percent of total.....	100.0	-	-	0.9	(D)	(D)	6.7	7.0	14.1	18.5	7.9	35.1	9.8	(D)	-
Value.....\$1,000..	255,413	-	-	1,144	(D)	(D)	11,126	12,661	28,679	42,947	20,085	105,533	33,238	(D)	-
Percent of total.....	100.0	-	-	0.4	(D)	(D)	4.4	5.0	11.2	16.8	7.9	41.3	13.0	(D)	-
East North Central:															
Quantity.....1,000 short tons..	72,445	-	-	-	4,433	(D)	28,268	29,464	9,465	(D)	815	(D)	-	-	-
Percent of total.....	100.0	-	-	-	6.2	(D)	39.0	40.7	13.0	(D)	1.1	(D)	-	-	-
Value.....\$1,000..	282,233	-	-	-	13,953	(D)	100,983	120,093	42,690	(D)	4,514	(D)	-	-	-
Percent of total.....	100.0	-	-	-	4.9	(D)	35.8	42.6	15.1	(D)	1.6	(D)	-	-	-
West North Central:															
Quantity.....1,000 short tons..	3,288	-	-	-	-	-	509	(D)	2,779	-	-	-	-	-	-
Percent of total.....	100.0	-	-	-	-	-	15.5	(D)	84.5	-	-	-	-	-	-
Value.....\$1,000..	14,594	-	-	-	-	-	2,117	(D)	12,477	-	-	-	-	-	-
Percent of total.....	100.0	-	-	-	-	-	14.5	(D)	85.5	-	-	-	-	-	-
South Atlantic:															
Quantity.....1,000 short tons..	117,274	-	-	-	576	551	489	23,989	35,982	18,434	17,865	14,711	4,677	-	-
Percent of total.....	100.0	-	-	-	0.5	0.5	0.4	20.5	30.7	15.7	15.2	12.5	4.0	-	-
Value.....\$1,000..	589,632	-	-	-	1,657	1,711	1,823	98,804	162,099	93,837	101,918	94,914	32,869	-	-
Percent of total.....	100.0	-	-	-	0.3	0.3	0.3	16.7	27.5	15.9	17.3	16.1	5.6	-	-
East South Central:															
Quantity.....1,000 short tons..	52,636	-	-	2,327	(D)	10,857	10,353	5,785	2,291	5,117	3,477	4,967	2,803	4,659	(D)
Percent of total.....	100.0	-	-	4.4	(D)	20.6	19.7	11.0	4.4	9.7	6.6	9.4	5.3	8.9	(D)
Value.....\$1,000..	249,854	-	-	6,686	(D)	34,978	36,255	23,057	10,691	25,799	19,979	32,057	20,646	39,706	(D)
Percent of total.....	100.0	-	-	2.7	(D)	14.0	14.5	9.2	4.3	10.3	8.0	12.8	8.3	15.9	(D)
West South Central:															
Quantity.....1,000 short tons..	198	-	-	-	-	-	-	-	-	-	-	-	198	(D)	-
Percent of total.....	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	(D)	-
Value.....\$1,000..	1,677	-	-	-	-	-	-	-	-	-	-	-	1,677	(D)	-
Percent of total.....	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	(D)	-
<u>Mechanically Crushed, Screened, or Sized</u>															
United States:															
Quantity.....1,000 short tons..	98,658	1,234	1,997	1,105	4,271	18,087	22,277	23,672	11,848	6,717	3,136	2,356	657	1,301	(D)
Percent of total.....	100.0	1.3	2.0	1.1	4.3	18.3	22.6	24.0	12.0	6.8	3.2	2.4	0.7	1.3	(D)
Value.....\$1,000..	390,362	2,044	4,253	2,659	11,756	56,263	79,978	94,791	53,904	34,561	17,954	15,114	4,810	12,275	(D)
Percent of total.....	100.0	0.5	1.1	0.7	3.0	14.4	20.5	24.3	13.8	8.9	4.6	3.9	1.2	3.1	(D)
Middle Atlantic (Pennsylvania):															
Quantity.....1,000 short tons..	16,756	235	(D)	250	421	1,310	4,078	5,599	3,162	1,379	128	42	152	(D)	-
Percent of total.....	100.0	1.4	(D)	1.5	2.5	7.8	24.3	33.4	18.9	8.2	0.8	0.3	0.9	(D)	-
Value.....\$1,000..	66,887	453	(D)	621	1,165	4,021	14,411	22,213	14,673	6,988	837	263	1,242	(D)	-
Percent of total.....	100.0	0.7	(D)	0.9	1.7	6.0	21.6	33.2	21.9	10.4	1.3	0.4	1.9	(D)	-
East North Central:															
Quantity.....1,000 short tons..	23,119	354	-	(D)	1,095	6,931	6,982	5,085	1,965	224	353	130	(D)	-	-
Percent of total.....	100.0	1.5	-	(D)	4.7	30.0	30.2	22.0	8.5	1.0	1.5	0.6	(D)	-	-
Value.....\$1,000..	83,428	681	-	(D)	3,003	21,538	24,978	20,337	8,805	1,170	2,054	862	(D)	-	-
Percent of total.....	100.0	0.9	-	(D)	3.6	25.8	29.9	24.4	10.5	1.4	2.5	1.0	(D)	-	-
West North Central:															
Quantity.....1,000 short tons..	1,155	-	-	-	124	(D)	796	219	(D)	(D)	16	-	-	-	-
Percent of total.....	100.0	-	-	-	10.7	(D)	68.9	19.0	(D)	(D)	1.4	-	-	-	-
Value.....\$1,000..	4,087	-	-	-	362	(D)	2,703	929	(D)	(D)	93	-	-	-	-
Percent of total.....	100.0	-	-	-	8.9	(D)	66.1	22.7	(D)	(D)	2.3	-	-	-	-
South Atlantic:															
Quantity.....1,000 short tons..	23,398	532	(D)	-	(D)	2,295	5,119	8,080	2,930	1,623	2,819	(D)	-	-	-
Percent of total.....	100.0	2.3	(D)	-	(D)	9.8	21.9	34.5	12.5	6.9	12.1	(D)	-	-	-
Value.....\$1,000..	97,436	1,322	(D)	-	(D)	6,976	18,736	32,382	13,053	8,307	16,660	(D)	-	-	-
Percent of total.....	100.0	1.4	(D)	-	(D)	7.2	19.2	33.2	13.4	8.5	17.1	(D)	-	-	-
East South Central:															
Quantity.....1,000 short tons..	24,216	757	(D)	737	1,789	4,888	4,693	3,822	3,388	2,921	339	760	21	101	-
Percent of total.....	100.0	3.1	(D)	3.0	7.4	20.2	19.4	15.8	14.0	12.1	1.4	3.1	0.1	0.4	-
Value.....\$1,000..	94,910	1,692	(D)	1,756	4,861	15,616	16,950	15,480	15,546	15,202	1,950	4,874	148	835	-
Percent of total.....	100.0	1.8	(D)	1.9	5.1	16.4	17.9	16.3	16.4	16.0	2.1	5.1	0.1	0.9	-

See footnotes at end of table.

TABLE 6C. Shipments of Primary Products Distributed by Value Per Short Ton, by Geographic Areas: 1963—Continued

Item and geographic area	Total	Shipments by average value per short ton f.o.b. mine or plant of <sup>2</sup> —													
		Less than \$2.05	\$2.05 to \$2.29	\$2.30 to \$2.59	\$2.60 to \$2.94	\$2.95 to \$3.34	\$3.35 to \$3.79	\$3.80 to \$4.29	\$4.30 to \$4.84	\$4.85 to \$5.84	\$5.45 to \$6.14	\$6.15 to \$6.94	\$6.95 to \$7.84	\$7.85 to \$9.99	\$10.00 and over
		BITUMINOUS COAL—Continued													
PREPARED COAL SHIPPED (INCLUDING INTERPLANT TRANSFERS)—Continued															
Mechanically Crushed, Screened, Or Sized—Continued															
West South Central:															
Quantity.....1,000 short tons..	953	-	-	-	-	303	(D)	-	-	347	(D)	(D)	303	(D)	-
Percent of total.....	100.0	-	-	-	-	31.8	(D)	-	-	36.4	(D)	(D)	31.8	(D)	-
Value.....\$1,000..	5,058	-	-	-	-	982	(D)	-	-	1,885	(D)	(D)	2,191	(D)	-
Percent of total.....	100.0	-	-	-	-	19.4	(D)	-	-	37.3	(D)	(D)	43.3	(D)	-
		LIGNITE													
RAW COAL SHIPPED (INCLUDING INTERPLANT TRANSFERS)															
For use without preparation:															
Quantity.....1,000 short tons..	365	66	(D)	(D)	33	220	42	(D)	(D)	4	(D)	(D)	-	-	-
Percent of total.....	100.0	18.1	(D)	(D)	9.0	60.3	11.5	(D)	(D)	1.1	(D)	(D)	-	-	-
Value.....\$1,000..	1,075	105	(D)	(D)	90	706	156	(D)	(D)	18	(D)	(D)	-	-	-
Percent of total.....	100.0	9.8	(D)	(D)	8.4	65.6	14.5	(D)	(D)	1.7	(D)	(D)	-	-	-
For preparation at other establishments:															
Quantity.....1,000 short tons..	32	-	-	-	-	-	29	(D)	(D)	3	-	-	-	-	-
Percent of total.....	100.0	-	-	-	-	-	90.6	(D)	(D)	9.4	-	-	-	-	-
Value.....\$1,000..	131	-	-	-	-	-	118	(D)	(D)	13	-	-	-	-	-
Percent of total.....	100.0	-	-	-	-	-	90.1	(D)	(D)	9.9	-	-	-	-	-
Mechanically crushed, screened, or sized only:															
Quantity.....1,000 short tons..	4,619	2,007	(D)	2,612	(D)	(D)	(D)	(D)	-	-	-	(D)	-	-	(D)
Percent of total.....	100.0	43.5	(D)	56.5	-	-	-	-	-	-	-	-	-	-	-
Value.....\$1,000..	12,565	4,103	(D)	8,462	(D)	(D)	(D)	(D)	-	-	-	(D)	-	-	(D)
Percent of total.....	100.0	32.7	(D)	67.3	-	-	-	-	-	-	-	-	-	-	-

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.

<sup>1</sup>The "average values" are based on the entire shipments of the specified product by each establishment. Thus they are representative of varied average prices among establishments but not of variations within an establishment.

TABLE 6D. Shipments of Bituminous Coal Produced in All Industries, by County:  
1963 and 1958

(For net production of coal by county, see table 2B)

Division, State, and county	Net coal shipments <sup>1</sup>				1963							
					Raw coal shipped				Prepared coal shipped (including interplant transfers)			
	1963		1958		For use without preparation		For preparation at other establishments		Mechanically cleaned		Mechanically crushed, screened, or sized	
	Short tons (1,000)	Value (\$1,000)	Short tons (1,000)	Value (\$1,000)	Short tons (1,000)	Value (\$1,000)	Short tons (1,000)	Value (\$1,000)	Short tons (1,000)	Value (\$1,000)	Short tons (1,000)	Value (\$1,000)
United States, total.....	459,502	2,059,734	417,075	2,062,140	65,619	240,920	81,372	283,769	295,225	1,428,452	98,658	390,362
Middle Atlantic (Pennsylvania).....	71,886	362,593	69,617	380,374	10,315	40,293	18,331	72,626	44,815	255,413	16,756	66,887
Allegheny.....	7,425	39,728	8,422	52,673	250	958	1,316	5,338	5,776	32,654	1,398	6,116
Armstrong.....	3,742	15,858	2,633	11,652	1,099	4,062	543	2,013	1,919	8,599	724	3,197
Beaver.....	498	1,795	497	2,108	148	459	(D)	(D)	-	-	350	1,336
Bedford.....	304	1,256	154	649	53	204	23	93	(D)	(D)	(D)	(D)
Butler.....	2,109	7,954	2,136	8,441	653	2,404	291	994	610	2,376	846	3,174
Cambria.....	5,665	28,168	8,597	52,972	1,139	5,431	1,588	9,858	2,465	13,510	2,061	9,228
Centre.....	1,120	4,493	986	3,906	(D)	(D)	-	-	(D)	(D)	558	2,064
Clarion.....	3,189	11,455	2,975	11,007	375	1,308	281	927	1,804	6,923	1,010	3,224
Clearfield.....	7,228	28,371	5,362	22,732	1,077	3,905	1,880	5,759	2,242	9,639	3,909	14,822
Clinton.....	483	1,643	577	2,445	86	339	-	-	-	-	397	1,304
Elk.....	436	1,581	358	1,493	(D)	(D)	10	42	(D)	(D)	255	916
Fayette.....	5,862	36,908	6,012	38,614	515	2,099	(D)	(D)	(D)	(D)	(D)	(D)
Greene.....	6,772	40,597	8,356	51,860	(D)	(D)	3,106	16,136	5,336	34,543	(D)	(D)
Indiana.....	6,833	34,792	6,226	32,314	1,035	3,990	604	2,248	4,873	26,521	925	4,281
Jefferson.....	2,213	7,922	1,082	4,554	754	2,534	586	1,753	889	3,337	570	2,051
Lawrence.....	840	3,199	1,009	3,789	368	1,154	-	-	-	-	472	2,045
Mercer.....	855	3,346	759	3,019	(D)	(D)	162	433	(D)	(D)	(D)	(D)
Somerset.....	3,593	17,193	2,958	14,300	761	3,137	886	3,624	2,085	10,804	747	3,252
Tioga.....	326	1,583	331	1,594	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Venango.....	447	1,652	512	2,187	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Washington.....	8,296	54,943	5,483	35,662	221	957	6,517	21,640	7,875	53,323	200	663
Westmoreland.....	3,367	17,140	3,628	20,062	267	1,080	146	559	3,071	15,940	29	120
East North Central, total.....	105,926	400,935	93,338	373,308	10,362	35,274	12,802	30,539	72,445	282,233	23,119	83,428
Ohio.....	38,465	144,980	33,970	138,309	7,990	27,125	8,042	19,856	14,580	59,221	15,895	58,634
Athens.....	502	2,293	808	3,718	(D)	(D)	(D)	(D)	(D)	(D)	382	1,741
Belmont.....	7,152	28,872	5,994	25,683	(D)	(D)	(D)	(D)	(D)	(D)	3,845	14,644
Carrroll.....	384	1,422	320	1,122	88	296	(D)	(D)	-	-	296	1,126
Columbiana.....	1,491	5,198	1,337	4,831	894	2,932	101	323	-	-	597	2,266
Coshocton.....	1,986	7,763	1,332	5,302	1,620	6,402	-	-	(D)	(D)	(D)	(D)
Gallia.....	873	3,065	1,006	3,356	(D)	(D)	126	327	(D)	(D)	756	2,631
Quernsey.....	119	406	214	749	(D)	(D)	(D)	(D)	(D)	(D)	-	-
Harrison.....	8,478	33,701	7,381	34,398	1,673	5,532	(D)	(D)	(D)	(D)	(D)	(D)
Jackson.....	320	1,273	284	1,092	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Jefferson.....	3,703	14,227	3,971	15,785	(D)	(D)	1,138	3,858	(D)	(D)	1,583	6,057
Lawrence.....	382	1,596	372	1,326	(D)	(D)	-	(D)	(D)	(D)	-	-
Mahoning.....	1,444	6,219	960	4,432	123	480	(D)	(D)	-	-	1,321	5,739
Meigs.....	305	1,020	532	1,738	106	368	-	-	-	-	199	652
Muskingum.....	127	499	708	2,204	(D)	(D)	-	-	-	-	(D)	(D)
Noble.....	1,777	4,921	1,038	2,578	738	2,273	-	-	(D)	(D)	(D)	(D)
Perry.....	2,153	7,972	1,600	6,417	158	490	(D)	(D)	(D)	(D)	(D)	(D)
Stark.....	567	1,861	693	2,440	83	265	(D)	(D)	-	-	484	1,596
Tuscarawas.....	2,490	8,530	2,228	8,281	(D)	(D)	(D)	(D)	(D)	(D)	1,470	4,765
Indiana.....	15,216	57,593	15,059	58,116	1,545	5,491	-	-	11,318	42,925	2,353	9,177
Clay.....	992	3,739	765	3,262	(D)	(D)	-	-	(D)	(D)	(D)	(D)
Warrick.....	5,114	18,120	4,438	16,028	1,272	4,386	-	-	(D)	(D)	(D)	(D)
Illinois.....	52,245	198,362	44,309	176,883	827	2,658	4,760	10,683	46,547	180,087	4,871	15,617
Fulton.....	6,947	27,912	4,678	19,472	(D)	(D)	-	-	6,921	27,814	(D)	(D)
Peoria.....	944	4,616	323	1,571	(D)	(D)	-	-	916	4,472	(D)	(D)
Saline.....	4,968	18,897	(NA)	(NA)	(D)	(D)	(D)	(D)	4,029	16,241	(D)	(D)
Williamson.....	5,750	21,521	6,405	25,357	(D)	(D)	(D)	(D)	5,224	19,805	(D)	(D)
West North Central.....	5,595	22,959	4,572	18,839	1,152	4,278	-	-	3,288	14,594	1,155	4,087
Iowa.....	1,230	4,281	1,261	4,520	219	833	-	-	-	-	1,011	3,448
Mahaska.....	340	1,138	190	632	43	156	-	-	-	-	297	982
Marion.....	659	2,233	676	2,263	40	141	-	-	-	-	619	2,092
South Atlantic.....	164,232	778,470	151,349	806,869	23,560	91,402	30,067	109,501	117,274	589,632	23,398	97,436
Maryland.....	1,196	4,617	889	3,952	730	2,770	143	483	-	-	466	1,847
Alleghany.....	337	1,617	334	1,591	170	636	40	180	-	-	167	981
Garrett.....	859	3,000	555	2,361	560	2,134	103	303	-	-	299	866
Virginia.....	30,816	129,289	26,255	128,386	7,765	27,641	7,595	25,255	15,608	70,868	7,442	30,280

1963 and 1958--Continued

Division, State, and county	Net coal shipments <sup>1</sup>				1963							
					Raw coal shipped				Prepared coal shipped (including interplant transfers)			
	1963		1958		For use without preparation		For preparation at other establishments		Mechanically cleaned		Mechanically crushed, screened, or sized	
	Short tons (1,000)	Value (\$1,000)	Short tons (1,000)	Value (\$1,000)	Short tons (1,000)	Value (\$1,000)	Short tons (1,000)	Value (\$1,000)	Short tons (1,000)	Value (\$1,000)	Short tons (1,000)	Value (\$1,000)
South Atlantic—Continued												
West Virginia.....	132,213	644,543	124,193	674,478	15,063	60,986	22,329	83,763	101,666	518,764	15,484	64,793
Barbour.....	2,753	11,608	3,086	14,080	360	1,391	268	936	1,533	7,162	860	3,055
Boone.....	6,644	30,489	5,410	26,410	324	1,363	281	1,012	5,848	27,438	472	1,688
Brooke.....	888	3,559	696	3,401	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Fayette.....	6,491	32,209	5,251	35,837	1,059	4,462	5,553	3,827	3,827	20,617	1,605	7,130
Gilmer.....	1,135	4,784	334	1,292	15	66	167	512	(D)	(D)	(D)	(D)
Greenbrier.....	884	3,916	1,121	5,963	406	1,613	414	1,368	-	-	478	2,303
Harrison.....	7,278	29,509	6,658	31,339	747	2,952	972	3,333	4,576	19,870	1,955	6,687
Kanawha.....	10,804	45,509	8,532	39,586	2,691	10,480	3,914	12,840	6,614	29,333	1,499	5,696
Logan.....	16,903	76,462	16,717	81,352	156	564	1,594	5,388	15,625	72,112	1,122	3,786
McDowell.....	17,139	104,894	16,967	113,732	1,166	5,830	5,783	26,516	14,000	87,796	1,973	11,268
Marion.....	9,122	47,739	9,550	53,477	(D)	(D)	70	249	9,024	47,378	(D)	(D)
Mason.....	379	1,352	484	1,649	61	234	(D)	(D)	-	-	318	1,118
Mercer.....	1,421	8,512	1,139	6,578	205	1,002	240	682	1,216	7,510	-	-
Mingo.....	4,742	22,448	6,177	30,635	531	2,207	622	2,084	3,566	17,623	645	2,618
Nicholas.....	6,099	30,740	5,372	29,863	841	3,564	919	3,463	4,520	24,164	738	3,012
Preston.....	3,125	10,698	2,024	9,066	989	2,862	1,396	4,591	1,536	5,562	600	2,274
Raleigh.....	7,427	39,990	7,389	46,295	927	4,050	1,080	3,907	5,253	29,800	1,247	6,140
Randolpn.....	996	4,286	839	4,623	385	1,593	184	792	-	-	611	2,693
Taylor.....	181	660	320	1,265	(D)	(D)	(D)	(D)	-	-	(D)	(D)
Upshur.....	777	3,212	1,494	6,472	(D)	(D)	113	457	(D)	(D)	263	1,031
Webster.....	777	3,547	719	4,025	172	723	399	1,594	(D)	(D)	(D)	(D)
Wyoming.....	11,970	63,885	9,954	60,430	504	2,179	585	2,054	11,258	60,937	208	769
East South Central.....	96,049	410,155	84,736	396,265	19,197	65,391	(D)	(D)	52,636	249,854	24,216	94,910
Kentucky.....	76,457	293,931	66,671	292,696	16,008	51,923	16,556	56,768	42,520	175,271	17,929	66,737
Bell.....	2,094	7,463	1,540	6,641	1,122	3,885	633	1,892	(D)	(D)	(D)	(D)
Clay.....	2,181	8,937	1,612	6,194	555	1,823	717	2,759	326	1,172	1,300	5,942
Floyd.....	6,972	33,527	4,905	28,539	1,184	3,983	3,401	12,789	3,384	18,099	2,404	11,445
Harlan.....	3,396	15,592	4,757	26,264	1,168	4,044	3,445	13,899	1,680	9,223	548	2,325
Hopkins.....	11,461	39,245	11,945	44,011	554	2,064	647	1,569	9,734	33,925	1,173	3,256
Johnson.....	370	1,329	448	1,929	189	611	(D)	(D)	-	-	181	718
Knott.....	434	1,503	790	2,621	(D)	(D)	521	1,781	-	-	(D)	(D)
Knox.....	279	1,109	340	1,484	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Laurel.....	100	397	419	1,178	(D)	(D)	(D)	(D)	-	-	(D)	(D)
Leslie.....	1,118	5,364	2,159	8,836	(D)	(D)	(D)	267	1,025	-	-	(D)
Letcher.....	4,629	21,870	5,228	27,293	1,193	3,952	2,954	9,246	(D)	(D)	(D)	(D)
McCreary.....	411	1,443	372	1,466	(D)	(D)	-	-	-	-	(D)	(D)
Magoffin.....	175	598	(NA)	(NA)	11	36	4	11	-	-	164	562
Muhlenberg.....	16,122	51,842	8,984	30,005	(D)	(D)	(D)	(D)	12,088	40,400	(D)	(D)
Perry.....	5,095	19,040	4,845	22,832	(D)	(D)	393	1,350	(D)	(D)	1,761	5,763
Pike.....	9,538	37,805	5,520	28,443	2,532	8,230	1,916	6,138	3,230	15,796	3,776	13,779
Tennessee.....	6,413	25,087	6,304	25,384	2,004	7,028	(D)	(D)	161	805	4,248	17,254
Anderson.....	1,652	6,102	1,208	4,919	277	953	(D)	(D)	-	-	1,375	5,149
Campbell.....	1,877	7,900	1,000	3,928	(D)	(D)	250	1,023	(D)	(D)	1,405	6,092
Claiborne.....	436	1,742	473	1,996	228	785	170	544	(D)	(D)	(D)	(D)
Grundy.....	366	1,731	731	2,994	(D)	(D)	(D)	(D)	-	-	(D)	(D)
Marion.....	273	1,122	773	3,379	(D)	(D)	-	-	-	-	(D)	(D)
Morgan.....	377	1,249	485	2,075	(D)	(D)	(D)	(D)	-	-	(D)	(D)
Scott.....	513	1,865	671	2,427	422	1,510	-	-	-	-	91	355
Sequatchie.....	100	382	183	615	(D)	(D)	(D)	(D)	-	-	(D)	(D)
Alabama.....	13,179	91,137	11,761	78,185	1,185	6,440	807	3,498	9,955	73,778	2,039	10,919
Bibb.....	116	663	(NA)	(NA)	(D)	(D)	-	-	(D)	(D)	(D)	(D)
Jefferson.....	7,514	52,667	7,416	50,919	283	1,659	232	965	5,810	43,492	1,421	7,516
Marion.....	549	2,778	461	2,750	270	1,421	(D)	(D)	(D)	(D)	(D)	(D)
Tuscaloosa.....	367	1,750	567	2,605	(D)	(D)	-	-	(D)	(D)	-	-
Walker.....	3,839	27,201	2,886	19,359	296	1,582	411	1,497	3,113	23,343	430	2,276
West South Central.....	1,241	7,306	2,047	14,354	90	571	-	-	198	1,677	953	5,058
Arkansas.....	228	1,528	390	3,068	56	363	-	-	(D)	(D)	(D)	(D)
Johnson.....	112	770	214	1,683	(D)	(D)	-	-	(D)	(D)	(D)	(D)
Oklahoma.....	1,013	5,778	1,657	11,286	34	208	-	-	(D)	(D)	(D)	(D)
Craig.....	318	1,036	(NA)	(NA)	15	54	-	-	-	-	303	982
Mountain.....	13,518	69,916	10,394	62,996	924	3,576	(D)	(D)	(D)	(D)	(D)	(D)
Wyoming.....	3,149	8,893	1,634	5,613	(D)	(D)	-	-	(D)	(D)	3,056	8,429
Colorado.....	3,972	23,513	3,121	19,129	277	1,311	(D)	(D)	585	2,830	3,110	19,372
Fremont.....	312	1,237	243	886	134	528	-	-	(D)	(D)	(D)	(D)
Gunnison.....	117	610	206	1,223	(D)	(D)	(D)	(D)	-	-	(D)	(D)
Weld.....	715	3,704	575	2,719	-	-	-	-	-	-	715	3,704

TABLE 7A. Supplies Used in the Industries, by Geographic Areas, 1963 and 1958,  
and by Type of Operation, 1963

(For the quantity and cost of coal received for preparation, see table 6A. For the quantity and total cost of purchased fuels and electric energy used, and the total quantity of coal produced and used for fuel, see table 3)

Industry, geographic area, type of operation, and year	Total cost of supplies used (\$1,000)	Explosives <sup>1</sup>		Steel-mill shapes and forms <sup>2</sup>		Cost of round or hewn woods products and stumpage <sup>3</sup> (\$1,000)	Cost of other supplies (\$1,000)	Cost of supplies undistributed by type (\$1,000)
		Quantity	Cost	Quantity	Cost			
		(1,000 pounds)	(\$1,000)	(short tons)	(\$1,000)			
1211.—BITUMINOUS COAL								
United States, total:								
1963.....	4365,480	249,076	21,400	226,870	46,848	16,460	4232,559	47,954
1958 <sup>5</sup> .....	349,532	219,121	26,121	427,850	49,849	20,873	202,853	49,836
Middle Atlantic (Pennsylvania):								
1963.....	63,189	23,717	2,190	44,988	8,782	2,946	39,744	9,527
1958.....	55,037	25,658	2,903	43,726	7,894	4,406	33,915	5,919
East North Central, total:								
1963.....	70,199	95,155	5,422	37,187	7,730	1,246	51,143	4,658
1958.....	63,991	90,316	7,648	75,740	8,761	1,571	40,348	5,663
Ohio:								
1963.....	30,834	37,805	2,062	11,292	2,222	584	22,565	3,401
1958.....	25,779	45,148	3,303	26,485	2,135	560	16,341	3,440
Indiana:								
1963.....	8,273	30,310	1,342	2,593	678	97	5,547	609
1958.....	(D)	18,599	1,821	20,257	1,969	197	(D)	520
Illinois:								
1963.....	31,092	27,040	2,018	22,537	4,830	565	23,031	648
1958.....	(D)	26,569	2,524	28,998	4,657	814	(D)	1,703
West North Central:								
1963.....	2,553	6,470	438	699	202	8	1,604	301
1958.....	(D)	4,331	631	1,000	253	34	(D)	428
South Atlantic:								
1963.....	145,479	39,167	6,591	101,651	21,512	9,856	90,046	17,474
1958.....	142,686	45,410	7,883	167,466	21,512	10,864	84,422	18,005
Maryland:								
1963.....	(D)	201	84	-	-	19	(D)	236
1958.....	844	190	43	66	13	10	478	300
Virginia:								
1963.....	(D)	11,912	1,764	18,779	2,027	863	(D)	3,977
1958.....	23,764	6,447	1,143	7,255	2,160	1,243	13,538	5,680
West Virginia:								
1963.....	124,359	27,054	4,743	82,872	19,485	8,974	77,870	13,287
1958.....	118,074	38,755	6,693	160,125	19,339	9,611	70,404	12,027
East South Central, total:								
1963.....	69,767	72,675	5,983	29,515	6,349	1,920	41,233	14,282
1958.....	71,557	46,185	5,842	108,289	8,289	3,037	37,167	17,222
Kentucky:								
1963.....	47,624	56,588	4,272	17,713	4,603	1,352	27,863	9,534
1958.....	52,481	33,975	4,051	40,812	5,413	2,197	25,579	15,241
Tennessee:								
1963.....	3,864	1,494	183	512	105	57	1,016	2,503
1958.....	5,360	963	157	4,125	787	259	3,660	497
Alabama:								
1963.....	18,279	14,593	1,528	11,290	1,641	511	12,445	2,154
1958.....	13,716	11,247	1,634	63,352	2,089	581	7,928	1,484
West South Central:								
1963.....	1,231	3,941	163	451	118	17	837	96
1958.....	2,749	4,093	613	400	148	135	1,061	792
Oklahoma:								
1963.....	1,026	2,976	117	448	118	(D)	(D)	80
1958.....	1,826	3,841	564	187	101	116	878	167
Mountain:								
1963.....	(D)	7,545	555	11,761	1,992	423	(D)	1,198
1958.....	(D)	2,971	569	31,086	2,966	742	(D)	1,753
Wyoming:								
1963.....	1,152	1,538	143	140	40	4	947	18
1958.....	(D)	281	54	235	73	41	(D)	17
Colorado:								
1963.....	3,516	2,432	178	6,050	855	233	1,932	318
1958.....	(D)	1,249	188	2,809	409	278	(D)	506
Utah:								
1963.....	(D)	580	136	4,484	829	151	(D)	754
1958.....	(D)	1,365	311	27,205	2,413	407	(D)	1,152

See footnotes at end of table.

TABLE 7A. Supplies Used in the Industries, by Geographic Areas: 1963 and 1958, and by Type of Operation, 1963—Continued

Industry, geographic area, type of operation, and year	Total cost of supplies used (\$1,000)	Explosives <sup>1</sup>		Steel-mill shapes and forms <sup>2</sup>		Cost of round or hewn woods products and stumpage <sup>3</sup> (\$1,000)	Cost of other supplies (\$1,000)	Cost of supplies undistributed by type (\$1,000)
		Quantity	Cost	Quantity	Cost			
		(1,000 pounds)	(\$1,000)	(short tons)	(\$1,000)			
1211.—BITUMINOUS COAL—Continued								
Pacific:								
1963.....	1,135	406	58	618	163	44	452	418
1958.....	(D)	157	32	166	26	84	(D)	54
Washington:								
1963.....	240	120	26	68	21	(D)	(D)	(D)
1958.....	(D)	157	32	166	26	84	(D)	54
Alaska:								
1963.....	895	286	32	550	142	(D)	(D)	(D)
1958.....	451	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
<u>Type of Operation</u> 1963								
Producing establishments, total.....	4365,051	249,076	21,400	226,870	46,848	16,460	4232,439	47,645
Mines only:								
Strip-pit.....	19,166	33,722	2,013	2,255	449	19	10,858	5,827
Underground.....	56,496	11,436	1,952	25,258	5,378	2,615	23,736	22,815
Auger.....	1,121	149	22	76	18	-	269	812
Strip-pit and underground.....	912	372	120	95	25	43	625	99
Strip-pit and auger.....	2,218	3,544	306	46	15	1	1,697	199
Other combinations.....	5,240	8,085	394	455	130	188	2,481	2,047
Mines with preparation plants:								
With mechanical cleaning:								
Strip-pit.....	34,031	87,252	5,047	7,943	2,276	120	25,522	1,066
Underground.....	169,695	27,911	5,400	151,068	31,572	11,158	115,605	5,960
Strip-pit and underground.....	11,150	12,335	986	4,014	955	670	8,336	203
Strip-pit and auger.....	3,010	4,816	379	929	236	-	1,648	747
Other combinations, auger only, and dredge...	12,846	13,102	1,374	15,206	2,078	636	8,455	303
With mechanical crushing, screening, or sizing only:								
Strip-pit.....	417,253	35,997	2,149	2,928	566	6	410,405	2,692
Underground.....	17,554	3,793	655	12,807	2,536	932	11,881	1,550
Strip-pit and auger and auger only.....	5,158	6,001	512	205	31	2	3,304	1,309
Strip-pit and underground and other combinations.....	1,105	413	70	350	107	43	819	66
Preparation plants only:								
Mechanical cleaning.....	5,623	73	13	3,160	457	4	4,738	411
Mechanical crushing, screening, or sizing only.	3,649	75	8	75	19	23	2,060	1,539
Nonproducing establishments.....	429	-	-	-	-	-	120	309
1212.—LIGNITE								
United States:								
1963.....	(4)	303	66	199	99	5	(4)	89
1958.....	1,133	176	33	124	88	-	880	132
1213.—BITUMINOUS COAL MINING SERVICES								
All establishments:								
1963.....	4,506	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	4,506
1958.....	3,698	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	3,698

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Excludes blasting accessories and breaking agents.<sup>2</sup>Represents such items as rails, wheels, track accessories, roof bolts, plates, pipe, tubing, piling, drill steel bars, other bars, sheets, strip, wire, wire products, and structural shapes.<sup>3</sup>Represents such items as logs, bolts, hewn cross ties, and hewn or round mine timbers and ties.<sup>4</sup>Figures for the lignite industry are included with those for the bituminous coal industry.<sup>5</sup>Excludes data for Alaska.



TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954

Industry, geographic area, and type of operation	Aggregate horsepower per production worker		1963 (1,000 hp.)									
			Aggregate horsepower (prime movers and electric motors driven by purchased energy)					Prime movers				
			Total	Loading equipment	Transportation equipment		All other equipment	Total	By type of equipment			All other equipment
					Highway type	Other			Loading equipment	Transportation equipment		
	Highway type	Other										
1963	1954											
12.—BITUMINOUS COAL AND LIGNITE MINING INDUSTRIES, TOTAL.....	53	32	6,301	1,399	915	1,536	2,451	2,575	551	916	500	608
1211.—BITUMINOUS COAL INDUSTRY												
United States, total.....	52	31	6,070	1,332	858	1,498	2,382	2,382	500	859	463	560
Geographic Area												
Middle Atlantic (Pennsylvania).....	56	36	1,164	284	134	278	468	487	183	134	39	131
East North Central, total.....	82	47	1,435	397	275	315	448	757	126	275	213	143
Ohio.....	99	50	704	156	211	116	221	480	94	211	75	100
Indiana.....	76	57	196	64	26	44	62	80	6	26	38	10
Illinois.....	68	43	535	177	38	155	165	197	26	38	100	33
West North Central.....	96	80	87	26	10	20	31	53	4	10	20	19
Missouri.....	144	78	60	18	5	15	22	37	1	5	15	16
Kansas.....	59	116	14	5	2	4	3	8	1	2	4	1
South Atlantic.....	39	24	1,881	281	240	490	870	560	91	241	61	167
Maryland.....	63	45	25	6	8	3	8	19	5	8	1	5
Virginia.....	36	19	366	51	69	96	150	136	16	70	13	37
West Virginia.....	40	25	1,490	224	163	391	712	405	70	163	47	125
East South Central, total.....	48	21	1,229	289	152	328	460	406	77	152	109	68
Kentucky.....	49	19	920	233	108	250	329	274	45	108	88	33
Tennessee.....	37	20	61	20	9	13	19	34	12	9	4	9
Alabama.....	48	28	248	36	35	65	112	98	20	35	17	26
West South Central.....	116	53	49	17	16	3	13	31	7	16	3	5
Oklahoma.....	146	54	46	16	15	3	12	29	6	15	3	5
Mountain.....	60	46	202	34	26	56	86	71	9	26	12	24
Wyoming.....	87	101	23	5	7	6	5	15	1	7	5	2
Colorado.....	41	31	51	13	5	17	16	15	2	5	4	4
New Mexico.....	102	68	27	1	4	2	20	18	1	4	(2)	13
Utah.....	62	35	97	15	9	30	43	21	5	9	2	5
Pacific.....	66	43	23	4	5	8	6	17	3	5	6	3
Alaska.....	105	47	18	3	4	6	5	16	3	4	6	3
Type of Operation												
Producing establishments, total.....	52	31	6,053	1,331	855	1,492	2,375	2,376	499	856	462	559
Mines only:												
Strip-pit.....	112	121	526	179	181	49	117	417	106	181	46	84
Underground.....	36	19	1,156	212	172	371	401	363	51	172	50	90
Auger.....	25	114	10	6	1	2	1	8	4	1	2	1
Strip-pit and underground.....	29	158	10	3	3	2	2	9	3	3	1	2
Strip-pit and auger.....	98	198	79	23	17	14	25	72	21	17	11	23
Other combinations.....	42	127	52	14	8	20	10	20	1	8	9	2
Mines with preparation plants:												
With mechanical cleaning:												
Strip-pit.....	130	94	802	288	102	181	232	446	89	102	175	80
Underground.....	42	24	2,009	260	125	603	1,021	291	28	126	48	89
Strip-pit and underground.....	45	27	126	24	7	35	60	29	1	7	19	2
Strip-pit and auger.....	108	79	79	20	14	13	32	63	17	14	13	19
Other combinations and dredge.....	49	25	139	24	14	32	69	40	8	14	4	14
With mechanical crushing, screening, or sizing only:												
Strip-pit:												
With crushing.....	110	(1)	383	124	89	37	133	310	88	89	36	97
With screening or sizing only.....	115	(1)	58	16	19	6	17	42	13	19	6	4
Underground:												
With crushing.....	36	(1)	234	53	32	69	80	67	13	32	8	14
With screening or sizing only.....	41	(1)	82	26	9	23	24	26	7	9	7	3
Auger.....	116	(1)	15	4	2	6	3	14	4	2	6	2
Strip-pit and underground and strip- pit and auger.....	83	(1)	130	40	40	16	34	116	34	40	15	27
Other combinations.....	40	(1)	10	2	2	4	2	5	1	2	1	1
Preparation plants only:												
Mechanical cleaning.....	68	56	115	10	12	5	88	26	8	12	2	4
Mechanical crushing.....	59		33	3	5	3	22	10	2	5	2	1
Mechanical screening and sizing only...	53	24	5	(2)	1	1	3	2	(2)	1	1	-
Nonproducing establishments.....	149	257	17	1	3	6	7	6	1	3	1	1

See footnotes at end of table.

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954—Continued

Industry, geographic area, and type of operation	1963 (1,000 hp.)—Continued							
	Prime movers—Continued		Electric motors					
	By use		Total	By type of equipment			By source of energy	
	Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated at same establishment
12.—BITUMINOUS COAL AND LIGNITE MINING INDUSTRIES, TOTAL.....	239	2,336	3,781	856	1,050	1,875	3,726	55
1211.—BITUMINOUS COAL INDUSTRY								
United States, total.....	233	2,149	3,743	840	1,049	1,854	3,688	55
<u>Geographic Area</u>								
Middle Atlantic (Pennsylvania).....	97	390	682	102	240	340	677	5
East North Central, total.....	63	694	687	274	104	309	678	9
Ohio.....	40	440	227	63	42	122	224	3
Indiana.....	3	77	120	59	7	54	116	4
Illinois.....	20	177	340	152	55	133	338	2
West North Central.....	(2)	53	34	22	(2)	12	34	(2)
Missouri.....	-	37	23	17	(2)	6	23	-
Kansas.....	(2)	8	6	4	-	2	6	-
South Atlantic.....	32	528	1,338	191	434	713	1,321	17
Maryland.....	3	16	6	1	2	3	6	(2)
Virginia.....	9	127	233	35	83	115	230	3
West Virginia.....	20	385	1,099	155	349	595	1,085	14
East South Central, total.....	32	374	842	215	224	403	823	19
Kentucky.....	14	260	647	188	162	297	646	1
Tennessee.....	5	29	29	8	9	12	27	2
Alabama.....	13	85	166	19	53	94	150	16
West South Central.....	3	28	19	10	(2)	9	18	1
Oklahoma.....	3	26	18	10	-	8	17	1
Mountain.....	3	68	132	25	45	62	131	1
Wyoming.....	1	14	8	4	1	3	8	-
Colorado.....	1	14	36	11	13	12	35	1
New Mexico.....	(2)	18	9	(2)	2	7	9	(2)
Utah.....	1	20	77	10	29	38	77	-
Pacific.....	3	14	9	1	2	6	6	3
Alaska.....	3	13	5	(2)	-	5	2	3
<u>Type of Operation</u>								
Producing establishments, total.....	232	2,144	3,731	840	1,044	1,847	3,677	54
Mines only:								
Strip-pit.....	49	368	110	73	3	34	109	1
Underground.....	29	334	804	161	326	317	793	11
Auger.....	-	8	2	2	-	-	2	-
Strip-pit and underground.....	1	8	1	(2)	1	(2)	1	(2)
Strip-pit and auger.....	12	60	8	2	3	3	7	1
Other combinations.....	(2)	20	32	13	11	8	32	(2)
Mines with preparation plants:								
With mechanical cleaning:								
Strip-pit.....	53	393	362	202	6	154	356	6
Underground.....	19	272	1,732	232	558	942	1,718	14
Strip-pit and underground.....	1	28	97	23	16	58	97	(2)
Strip-pit and auger.....	15	48	16	3	(2)	13	16	(2)
Other combinations and dredge.....	5	35	99	16	28	55	99	-
With mechanical crushing, screening, or sizing:								
Strip-pit:								
With crushing.....	13	297	74	36	1	37	73	1
With screening or sizing only.....	(2)	43	16	2	-	14	16	(2)
Underground:...								
With crushing.....	19	48	186	46	67	73	167	19
With screening or sizing only.....	4	22	56	19	16	21	56	(2)
Auger.....	4	10	1	(2)	-	1	1	(2)
Strip-pit and underground and strip- pit and auger.....	7	108	14	6	1	7	14	(2)
Other combinations.....	-	5	5	1	3	1	5	-
Preparation plants only:								
Mechanical cleaning.....	(2)	26	90	2	3	85	89	1
Mechanical crushing.....	1	9	23	1	1	21	23	(2)
Mechanical screening and sizing only...	-	2	3	(2)	-	3	3	-
Nonproducing establishments.....	1	5	12	(2)	5	7	11	1

See footnotes at end of table.

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954—Continued

Industry, geographic area, and type of operation	Aggregate horsepower per production worker		1963 (1,000 hp.)									
			Aggregate horsepower (prime movers and electric motors driven by purchased energy)					Prime movers				
			Total	Loading equipment	Transportation equipment		All other equipment	Total	Loading equipment	By type of equipment		All other equipment
					Highway type	Other				Transportation equipment		
	Highway type	Other										
1963	1954											
1212.—LIGNITE INDUSTRY												
United States, total.....	172	148	76	23	15	15	23	45	9	15	14	7
Geographic Area												
West North Central and West South Central..	176	145	72	22	14	14	22	42	8	14	13	7
West.....	125	242	4	1	1	1	1	3	1	1	1	(2)
Type of Operation												
Strip-pits with mechanical crushing, screening, or sizing only.....	182	(NA)	68	21	13	13	21	39	8	13	12	6
1213.—BITUMINOUS COAL MINING SERVICES												
United States, total.....	128	123	155	44	42	23	46	148	42	42	23	41
Geographic Area												
Middle Atlantic (Pennsylvania).....	138	110	58	19	17	5	17	56	18	17	5	16
South Atlantic.....	116	(NA)	47	10	12	9	16	46	10	12	9	15

See footnotes at end of table.

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954—Continued

Industry, geographic area, and type of operation	1963 (1,000 hp.)—Continued							
	Prime movers—Continued		Electric motors					
	By use		Total	By type of equipment			By source of energy	
	Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated at same establishment
1212.—LIGNITE INDUSTRY								
United States, total.....	3	42	31	14	1	16	31	(Z)
<u>Geographic Area</u>								
West North Central and West South Central..	3	39	30	14	1	15	30	(Z)
West.....	(Z)	3	1	-	-	1	1	-
<u>Type of Operation</u>								
Strip-pits with mechanical crushing, screening, or sizing only.....	3	36	29	13	1	15	29	(Z)
1213.—BITUMINOUS COAL MINING SERVICES								
United States, total.....	3	145	7	2	(Z)	5	7	(Z)
<u>Geographic Area</u>								
Middle Atlantic (Pennsylvania).....	3	53	2	1	-	1	2	(Z)
South Atlantic.....	(Z)	46	1	(Z)	(Z)	1	1	-

Standard Notes: - Represents zero.. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
 (Z) Less than 500 horsepower.

<sup>1</sup>Figures for mines with mechanical crushing, screening, or sizing only are included with those for mines only.

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with average of—					
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
1211.—BITUMINOUS COAL							
Establishments.....number..	6,115	5,621	202	191	87	13	1
Reporting water use, total.....do....	2,449	1,971	186	191	87	13	1
By source of water:							
Utility.....do....	186	122	19	27	14	4	-
Other than utility.....do....	1,457	1,091	138	151	67	9	1
Source not specified.....do....	806	758	29	13	6	-	-
By quantity of water intake:							
Under 1 million gallons.....do....	2,022	1,846	117	53	6	-	-
1 to 9 million gallons.....do....	134	53	24	44	11	2	-
10 to 19 million gallons.....do....	55	14	7	17	15	2	-
20 to 99 million gallons.....do....	114	27	18	36	30	3	-
100 million gallons and over.....do....	124	31	20	41	25	6	1
Employees.....do....	<sup>1</sup> 132,046	44,080	14,067	29,653	30,624	<u>9,637</u>	(D)
At establishments reporting water use.....do....	<sup>1</sup> 116,188	29,134	13,155	29,653	30,624	<u>9,637</u>	(D)
Value added in mining.....\$1,000..	1,578,078	394,897	189,839	444,836	427,373	<u>121,133</u>	(D)
Value added at establishments reporting water use.....do....	1,474,124	295,989	184,793	444,836	427,373	<u>121,133</u>	(D)
1212.—LIGNITE							
Establishments.....number..	59	56	3	-	-	-	-
Reporting water use, total.....do....	22	19	3	-	-	-	-
By source of water:							
Utility.....do....	4	3	1	-	-	-	-
Other than utility.....do....	13	11	2	-	-	-	-
Source not specified.....do....	5	5	-	-	-	-	-
By quantity of water intake:							
Under 1 million gallons.....do....	20	17	3	-	-	-	-
1 to 9 million gallons.....do....	2	2	-	-	-	-	-
Employees.....do....	512	289	223	-	-	-	-
At establishments reporting water use.....do....	460	237	223	-	-	-	-
Value added in mining.....\$1,000..	11,830	<u>11,830</u>	(D)	-	-	-	-
Value added at establishments reporting water use.....do....	11,413	<u>11,413</u>	(D)	-	-	-	-
1213.—BITUMINOUS COAL MINING SERVICES							
Establishments.....number..	131	127	4	-	-	-	-
Reporting water use, total.....do....	118	114	4	-	-	-	-
By source of water:							
Utility.....do....	6	6	-	-	-	-	-
Other than utility.....do....	91	87	4	-	-	-	-
Source not specified.....do....	21	21	-	-	-	-	-
By quantity of water intake:							
Under 1 million gallons.....do....	118	114	4	-	-	-	-
Employees.....do....	1,304	1,059	245	-	-	-	-
At establishments reporting water use.....do....	1,207	962	245	-	-	-	-
Value added in mining.....\$1,000..	16,780	<u>16,780</u>	(D)	-	-	-	-
Value added at establishments reporting water use.....do....	16,228	<u>16,228</u>	(D)	-	-	-	-

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.

<sup>1</sup>Includes figures for number of employees at separately reported central offices and related facilities. These were not distributed by size of establishment.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963

Type of operation and tons per man-hour <sup>1</sup>	Establish- ments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expend- itures
		Total	Payroll	Total	Man-hours	Wages			
	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
	1211.—BITUMINOUS COAL								
All establishments, total.....	6,115	2 <sup>1</sup> 32,046	2 <sup>7</sup> 52,491	116,975	214,421	642,338	1,578,078	2,358,326	210,835
Producing establishments, total.....	6,078	2 <sup>1</sup> 31,897	2 <sup>7</sup> 51,581	116,861	214,209	641,696	1,577,430	2,358,326	202,886
Mining operations only:									
Strip-pit, total.....	570	5,191	27,650	4,693	9,145	24,797	83,374	116,480	12,287
Less than 1.00.....	31	399	1,137	377	620	1,040	1,597	2,058	252
1.00 to 1.19.....	16	165	656	154	316	594	1,303	1,612	316
1.20 to 1.39.....	10	140	711	126	280	644	1,143	1,258	302
1.40 to 1.59.....	9	88	377	82	142	357	881	1,007	162
1.60 to 1.79.....	10	146	741	136	293	687	1,797	1,880	476
1.80 to 1.99.....	19	327	1,525	303	660	1,402	3,457	4,276	658
2.00 to 2.39.....	27	370	1,723	344	630	1,579	4,463	5,413	673
2.40 to 2.79.....	19	277	1,231	237	425	1,100	3,091	3,838	350
2.80 to 2.99.....	8	124	646	114	206	619	1,808	2,163	355
3.00 to 3.19.....	9	85	439	80	176	428	1,315	1,753	98
3.20 to 3.59.....	16	251	1,480	220	428	1,331	3,719	5,091	618
3.60 to 3.99.....	8	92	511	86	194	478	1,866	2,311	393
4.00 to 4.99.....	13	423	2,801	386	694	2,429	6,968	9,625	1,168
5.00 to 5.99.....	7	134	950	112	248	822	3,892	5,029	203
6.00 to 7.99.....	8	399	2,972	362	703	2,620	8,414	11,769	774
8.00 and over.....	10	349	2,748	305	590	2,429	15,681	19,634	1,522
Undistributed <sup>2</sup> .....	324	1,422	7,002	1,269	2,540	6,238	21,979	37,763	3,967
Underground, total.....	3,938	34,560	135,625	31,800	51,025	122,598	250,107	323,457	26,410
Less than 0.40.....	202	1,135	1,729	1,076	1,655	1,662	1,798	2,386	161
0.40 to 0.49.....	74	729	1,419	687	1,104	1,381	1,896	2,262	97
0.50 to 0.59.....	126	1,177	2,403	1,100	1,695	2,299	3,068	3,885	189
0.60 to 0.69.....	118	1,279	3,111	1,203	2,037	3,001	4,294	5,514	413
0.70 to 0.79.....	106	940	2,586	894	1,523	2,481	3,913	4,827	525
0.80 to 0.89.....	97	1,166	3,167	1,102	1,776	3,046	4,631	5,972	247
0.90 to 0.99.....	100	1,352	4,251	1,274	2,118	4,054	6,705	7,840	640
1.00 to 1.19.....	233	3,828	14,486	3,545	5,584	12,900	20,293	26,386	2,013
1.20 to 1.39.....	223	2,157	7,434	2,027	3,227	7,058	13,007	16,627	1,176
1.40 to 1.59.....	145	2,069	7,901	1,923	3,070	7,287	12,768	16,283	732
1.60 to 1.79.....	230	2,638	10,487	2,431	3,640	9,764	19,153	24,483	2,164
1.80 to 1.99.....	170	2,569	11,317	2,328	3,623	10,332	20,045	24,756	1,230
2.00 to 2.39.....	281	3,696	16,090	3,306	5,069	14,496	33,208	41,575	5,208
2.40 to 2.79.....	106	2,224	14,210	1,843	3,526	11,553	26,131	33,254	1,605
2.80 to 2.99.....	48	623	3,492	579	977	3,049	7,222	8,897	707
3.00 to 3.19.....	22	653	4,427	552	971	3,344	11,018	12,990	743
3.20 to 3.59.....	33	347	2,549	328	684	2,415	6,006	7,958	570
3.60 to 3.99.....	20	959	6,013	828	1,595	5,022	11,816	15,348	270
4.00 to 4.99.....	22	537	3,950	495	954	3,526	10,305	14,030	1,331
5.00 and over.....	52	308	1,356	293	425	1,318	3,624	4,653	395
Undistributed <sup>3</sup> .....	1,530	4,174	13,247	3,986	5,774	12,610	29,206	43,531	5,583
Auger, total.....	97	435	1,969	402	740	1,889	7,092	9,786	2,035
Less than 2.00.....	6	37	72	32	54	66	92	175	15
2.00 to 2.99.....	4	35	117	32	59	112	394	462	65
3.00 to 3.99.....	7	70	371	64	109	345	945	1,147	670
4.00 to 4.99.....	5	23	117	23	38	115	520	553	184
5.00 to 6.99.....	4	21	98	20	29	87	267	340	6
Undistributed <sup>3</sup> .....	71	249	1,194	231	451	1,164	4,874	7,109	1,067
All combinations.....	91	2,726	16,342	2,401	4,569	13,706	36,167	51,421	4,017
Mining operations with preparation plants:									
With mechanical cleaning:									
Strip-pit, total.....	108	6,933	54,075	6,178	13,102	48,110	175,034	234,818	39,838
Less than 1.00.....	5	83	645	80	188	612	804	1,094	121
1.00 to 1.59.....	4	249	1,213	235	482	1,153	2,720	2,972	946
1.60 to 1.99.....	4	109	612	98	171	508	1,651	2,107	154
2.00 to 2.39.....	6	256	1,673	236	477	1,506	3,963	4,976	711
2.40 to 2.79.....	11	545	4,056	501	1,048	3,646	9,705	12,433	7,553
2.80 to 3.19.....	5	378	3,351	351	762	3,088	8,568	10,602	1,286
3.20 to 3.59.....	6	353	2,694	315	638	2,386	8,269	9,828	7,197
3.60 to 3.99.....	4	599	4,803	517	1,049	4,115	12,717	15,761	2,428
4.00 to 4.99.....	13	1,046	8,650	957	1,978	7,803	26,337	33,817	3,987
5.00 to 5.99.....	12	1,296	10,341	1,149	2,360	9,258	30,173	45,613	3,352
6.00 to 6.99.....	6	586	4,680	536	1,066	4,232	19,285	23,793	643
7.00 and over.....	5	865	7,974	724	1,824	6,944	45,367	53,555	9,289
Undistributed <sup>3</sup> .....	27	568	3,383	479	1,059	2,855	5,475	18,267	2,171
Underground, total.....	301	52,765	343,023	48,174	91,043	303,167	690,656	937,098	61,111
Less than 0.50.....	4	170	671	158	254	622	654	728	6
0.50 to 0.79.....	8	235	1,057	224	351	987	1,705	1,831	286
0.80 to 0.99.....	6	485	2,419	457	844	2,232	4,567	4,567	449
1.00 to 1.19.....	18	2,203	12,472	1,988	3,564	10,786	18,293	24,750	898
1.20 to 1.39.....	32	6,878	42,376	6,415	12,027	37,407	70,300	94,636	7,090
1.40 to 1.59.....	44	9,693	62,321	8,920	16,491	55,797	108,660	142,613	6,670
1.60 to 1.79.....	29	6,012	38,872	5,498	10,307	34,401	76,027	99,345	5,136
1.80 to 1.99.....	22	4,053	26,451	3,754	7,037	23,638	50,025	68,346	5,206

See footnotes at end of table.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963—Continued

Type of operation and tons per man-hour <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expend- itures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
1211.—BITUMINOUS COAL--Continued									
Producing establishments--Continued									
Mining operations with preparation plants--Continued									
With mechanical cleaning--Continued									
Underground--Continued									
2.00 to 2.39.....	47	9,730	64,736	8,829	16,655	57,276	136,321	171,403	16,430
2.40 to 2.79.....	26	4,648	31,137	4,192	8,106	27,467	70,054	98,925	5,918
2.80 to 2.99.....	7	1,607	12,186	1,444	3,022	10,650	30,092	38,267	2,230
3.00 to 3.19.....	8	2,434	17,644	2,200	4,495	15,557	40,268	60,978	1,615
3.20 to 3.59.....	9	721	4,764	612	1,075	3,988	12,339	15,593	639
3.60 to 3.99.....	6	1,051	7,819	936	1,900	6,698	24,837	36,742	404
4.00 to 5.99.....	8	1,451	10,350	1,301	2,526	8,952	36,624	46,591	4,961
6.00 and over.....	7	312	1,744	265	419	1,446	4,559	20,148	1,012
Undistributed <sup>3</sup> .....	19	1,082	6,004	981	1,970	5,263	6,617	11,635	2,261
All combinations and dredge.....	53	6,817	46,689	6,356	12,654	42,396	106,186	155,213	11,110
With mechanical crushing:									
Strip-pit, total.....	185	3,849	21,032	3,490	7,216	18,922	62,874	86,977	18,955
Less than 1.00.....	8	74	220	69	132	197	486	603	48
1.00 to 1.19.....	4	70	460	68	167	451	682	953	312
1.20 to 1.39.....	7	240	917	230	472	870	2,236	2,406	341
1.40 to 1.59.....	7	226	1,012	219	417	985	1,555	2,076	169
1.60 to 1.79.....	8	126	605	112	293	530	1,539	1,981	134
1.80 to 1.99.....	14	300	1,536	279	695	1,445	3,724	4,751	723
2.00 to 2.39.....	16	312	1,511	294	630	1,419	4,120	5,446	553
2.40 to 2.79.....	14	350	1,602	310	578	1,388	4,841	5,825	748
2.80 to 3.19.....	10	148	837	131	300	748	2,184	3,063	478
3.20 to 3.59.....	11	345	2,003	309	563	1,803	5,621	7,198	1,127
3.60 to 3.99.....	7	87	596	74	163	471	1,996	2,371	360
4.00 to 4.99.....	10	253	1,722	211	443	1,530	5,238	7,916	8,859
5.00 to 6.99.....	6	200	1,146	162	309	971	3,612	5,741	537
7.00 to 7.99.....	5	145	1,010	129	254	894	4,450	5,507	44
8.00 and over.....	7	197	1,318	185	245	1,160	6,317	8,284	752
Undistributed <sup>3</sup> .....	51	776	4,537	708	1,555	4,060	14,273	22,856	3,770
Underground, total.....	236	7,088	36,052	6,548	11,910	32,859	72,709	93,876	10,744
Less than 0.40.....	16	291	1,013	274	585	957	849	1,130	199
0.40 to 0.59.....	14	207	618	191	346	608	826	955	172
0.60 to 0.69.....	15	352	1,454	302	530	1,276	2,316	2,981	113
0.70 to 0.79.....	8	222	737	212	382	704	1,031	1,283	109
0.80 to 0.89.....	10	284	954	264	484	875	1,285	1,740	138
0.90 to 0.99.....	9	205	770	188	326	698	1,049	1,347	94
1.00 to 1.19.....	14	744	3,446	729	1,329	3,374	5,814	7,002	279
1.20 to 1.39.....	11	285	1,228	252	501	1,096	1,985	2,693	72
1.40 to 1.59.....	11	385	2,085	345	619	1,838	3,744	4,428	74
1.60 to 1.79.....	9	816	5,339	769	1,469	4,852	12,927	15,798	518
1.80 to 1.99.....	10	1,081	6,283	1,014	1,799	5,773	13,409	16,379	1,305
2.00 to 2.39.....	14	775	4,866	710	1,321	4,357	10,979	13,406	897
2.40 to 2.79.....	7	336	1,925	275	500	1,583	5,888	4,831	2,589
2.80 to 2.99.....	4	108	680	101	221	593	1,669	2,351	212
3.00 to 3.99.....	9	313	2,207	293	506	2,053	4,931	6,235	1,251
4.00 to 4.99.....	3	78	480	73	130	446	1,434	2,046	461
6.00 and over.....	7	89	323	88	139	317	1,363	4,432	251
Undistributed <sup>3</sup> .....	65	517	1,644	468	723	1,459	1,210	4,839	2,010
Auger, total.....	18	138	741	129	195	682	2,833	3,692	151
2.00 to 4.99.....	4	48	303	45	84	273	441	842	-
5.00 and over.....	3	26	160	24	41	148	1,486	1,568	-
Undistributed <sup>3</sup> .....	11	64	278	60	70	261	906	1,282	151
All combinations.....	67	1,977	10,474	1,821	3,691	9,667	28,051	46,258	4,171
With mechanical screening or sizing only:									
Strip-pit, total.....	48	599	2,987	504	1,109	2,512	8,299	11,073	1,525
Less than 1.50.....	4	119	542	100	214	456	1,064	1,571	83
1.50 to 2.39.....	4	112	607	105	242	552	1,391	1,935	134
2.40 to 2.79.....	5	56	280	48	104	238	748	916	141
2.80 to 3.29.....	4	78	407	67	130	375	1,602	1,596	422
3.60 and over.....	7	118	673	77	202	458	2,336	2,993	555
Undistributed <sup>3</sup> .....	24	116	478	107	217	433	1,158	2,062	190
Underground, total.....	193	2,166	7,840	2,008	3,454	7,292	12,678	16,915	1,640
Less than 0.40.....	11	160	282	151	247	270	302	372	24
0.50 to 0.69.....	23	235	573	215	341	552	471	888	76
0.70 to 0.89.....	10	146	446	136	210	419	694	829	39
0.90 to 0.99.....	13	340	1,255	318	617	1,203	2,029	2,429	259
1.00 to 1.19.....	15	237	887	229	397	872	1,436	1,731	68
1.20 to 1.39.....	6	58	182	49	93	154	349	463	35
1.40 to 1.59.....	11	89	312	82	129	292	591	732	77
1.60 to 1.79.....	7	131	540	121	203	480	1,044	1,420	82
1.80 to 1.99.....	6	142	908	136	263	887	1,512	1,983	244
2.00 to 2.79.....	9	197	1,084	172	315	934	1,744	2,388	75
3.00 to 3.99.....	4	20	73	17	25	67	154	227	13
4.00 and over.....	3	19	59	13	2	56	146	282	10
Undistributed <sup>3</sup> .....	69	349	1,127	324	535	997	2,033	2,988	605

See footnotes at end of table.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963—Continued

Type of operation and tons per man-hour <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
1211.—BITUMINOUS COAL--Continued									
Producing establishments--Continued									
Preparation plants only:									
Mechanical cleaning, total.....	73	1,911	11,684	1,702	3,130	10,187	30,281	211,163	7,446
Less than 3.00.....	3	14	47	12	19	45	99	373	15
3.00 to 4.00.....	4	24	111	24	41	111	325	910	23
4.00 to 5.00.....	5	83	360	77	157	337	416	4,149	24
5.00 to 6.00.....	3	45	192	43	73	183	715	3,060	20
6.00 to 7.00.....	5	110	675	93	167	592	1,310	9,124	103
7.00 to 8.00.....	4	374	2,453	338	614	2,168	4,150	21,701	202
8.00 to 9.00.....	6	93	460	70	133	336	1,484	6,562	26
9.00 to 11.00.....	7	215	1,413	188	360	1,191	3,231	23,494	108
11.00 to 13.00.....	11	396	2,631	360	700	2,400	6,635	51,890	1,265
13.00 to 15.00.....	7	137	795	131	227	759	2,883	18,139	225
15.00 and over.....	10	289	1,794	239	399	1,323	3,945	57,337	492
Not distributed <sup>2</sup> .....	8	131	753	127	240	742	5,088	14,429	4,933
Mechanical crushing, screening, or sizing only, total.....	101	757	3,594	655	1,226	2,912	11,089	60,094	1,446
Less than 3.00.....	5	15	94	25	37	94	160	494	13
3.00 to 4.00.....	6	53	225	53	98	225	400	1,908	7
4.00 to 5.00.....	3	32	75	26	53	58	331	1,163	85
5.00 to 6.00.....	6	84	387	72	134	304	807	3,987	60
6.00 to 7.00.....	7	38	120	38	65	120	436	2,037	95
7.00 to 8.00.....	8	73	334	66	133	293	478	4,675	30
8.00 to 9.00.....	8	41	152	38	72	134	369	3,085	572
9.00 to 11.00.....	11	83	332	69	118	272	1,052	6,467	54
11.00 to 13.00.....	18	144	746	130	259	669	2,662	16,552	250
13.00 and over.....	14	112	778	86	121	513	3,202	15,314	158
Not distributed <sup>2</sup> .....	15	72	351	52	134	230	1,192	4,412	122
1212.—LIGNITE									
All establishments.....	59	512	2,760	441	884	2,245	11,830	14,112	4,633
Strip-pits, total.....	46	502	2,724	431	864	2,212	11,762	13,992	2,999
Less than 3.00.....	5	26	150	25	62	145	161	286	20
3.00 to 4.00.....	6	140	729	120	253	628	2,035	2,434	581
4.00 and over.....	7	279	1,647	237	438	1,286	8,875	9,791	2,260
Not distributed <sup>2</sup> .....	28	57	198	49	111	153	691	1,484	138

<sup>1</sup>Man-hour basis: (A) Represents zero.

(B) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>2</sup>Represents tonnage of coal shipped per man-hour worked by production, development, and exploration workers.

Numbers in parentheses for separately reported offices and related facilities. These were not distributed by detailed types of operation.

Represents establishments reporting no coal shipments; or no production, development, or exploration worker man-hours; or with production, development, or exploration worker man-hours spent on exploration or development work amounting to 30 percent or more of total man-hours of production, development, and exploration workers; or with cost of contract work amounting to 30 percent or more of production, development, and exploration worker wages; or with number of working proprietors amounting to 30 percent or more of number of production, development, and exploration workers.



**TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining, by Geographic Areas: 1963**

Geographic area and ratio of payroll to value added in mining <sup>1</sup>	Estab- lishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
1211.—BITUMINOUS COAL									
United States, total.....	6,115	132,046	752,491	116,975	214,421	642,338	1,578,078	2,358,326	210,835
Less than 0.10.....	117	617	1,473	588	946	1,324	24,360	37,428	13,580
0.10 to 0.19.....	253	2,710	16,390	2,478	4,912	14,955	98,516	135,817	13,877
0.20 to 0.29.....	516	8,866	55,539	7,957	15,788	49,227	215,338	311,654	37,810
0.30 to 0.39.....	576	17,754	111,869	16,233	31,341	99,714	313,940	450,075	30,071
0.40 to 0.49.....	692	22,639	138,215	20,804	39,255	122,703	309,178	438,164	38,292
0.50 to 0.59.....	916	32,748	172,568	30,057	52,890	156,658	318,690	468,893	22,407
0.60 to 0.69.....	758	17,986	103,734	16,523	30,743	91,311	160,545	252,159	15,876
0.70 to 0.79.....	415	10,398	52,690	9,612	17,153	48,870	73,421	124,139	6,672
0.80 to 0.89.....	294	5,030	24,386	4,549	8,114	21,472	28,876	51,370	11,054
0.90 to 0.99.....	128	2,904	13,891	2,639	4,472	12,406	14,823	25,513	4,778
1.00 and over.....	526	5,675	24,553	5,093	8,053	21,143	19,067	41,320	5,441
Undistributed <sup>2</sup> .....	924	4,719	37,183	442	754	2,555	1,324	21,794	10,977
Northeast region, total.....	1,174	24,196	142,991	20,823	38,874	114,974	275,840	438,865	43,874
Less than 0.10.....	26	83	205	79	146	184	3,338	5,728	401
0.10 to 0.19.....	54	290	1,093	269	509	1,007	6,480	8,341	1,141
0.20 to 0.29.....	118	1,745	10,032	1,556	3,415	8,685	37,659	46,551	9,817
0.30 to 0.39.....	120	3,882	23,450	3,501	6,932	20,403	65,540	107,192	8,198
0.40 to 0.49.....	113	4,137	26,037	3,860	7,239	23,645	58,850	78,974	5,492
0.50 to 0.59.....	122	5,223	28,671	4,781	9,035	26,355	53,771	105,156	2,510
0.60 to 0.69.....	129	2,926	17,450	2,815	5,123	15,990	27,724	40,296	3,322
0.70 to 0.79.....	88	1,551	8,051	1,457	2,626	7,561	10,573	18,144	831
0.80 to 0.89.....	59	437	1,935	394	663	1,729	2,299	3,796	660
0.90 to 0.99.....	17	449	2,427	384	716	1,983	2,560	5,616	2,661
1.00 and over.....	134	1,879	8,713	1,652	2,340	6,897	7,778	14,235	1,538
Undistributed <sup>2</sup> .....	194	1,594	14,927	75	130	535	( <sup>3</sup> )	4,836	7,303
East North Central division, total...	554	20,263	135,595	17,529	34,210	114,906	307,782	433,097	55,490
Less than 0.10.....	13	33	121	29	50	88	2,978	975	11,151
0.10 to 0.19.....	31	410	3,611	355	848	3,246	22,104	23,235	5,052
0.20 to 0.29.....	68	2,747	20,890	2,421	4,890	18,276	81,223	113,644	14,291
0.30 to 0.39.....	56	2,264	16,470	2,038	4,385	14,685	45,737	59,690	6,441
0.40 to 0.49.....	82	4,513	31,431	4,036	8,150	28,126	69,395	95,031	9,319
0.50 to 0.59.....	76	3,974	23,761	3,575	6,289	21,218	44,643	69,266	2,672
0.60 to 0.69.....	58	1,876	11,555	1,724	3,406	10,476	17,768	28,517	2,731
0.70 to 0.79.....	31	1,756	10,741	1,638	3,061	10,024	14,719	23,550	1,198
0.80 to 0.89.....	26	628	3,838	570	1,165	3,530	4,403	7,963	720
0.90 to 0.99.....	15	629	3,341	597	895	3,039	3,545	5,057	264
1.00 and over.....	43	551	2,167	511	1,004	2,000	819	4,994	985
Undistributed <sup>2</sup> .....	55	882	7,669	35	67	252	448	1,175	666
West North Central division, total...	85	1,675	9,881	907	1,923	5,649	17,927	22,997	6,897
Less than 0.10.....	2	16	51	14	23	43	412	474	16
0.10 to 0.19.....	6	253	1,780	228	524	1,607	7,055	9,054	672
0.20 to 0.29.....	15	259	1,816	240	530	1,672	5,374	6,933	360
0.30 to 0.39.....	11	224	1,674	207	480	1,510	3,692	4,635	5,644
0.40 to 0.49.....	10	126	520	115	197	475	944	1,336	85
0.50 to 0.59.....	6	7	26	7	10	26	40	34	-
0.60 to 0.69.....	3	41	135	39	51	116	178	210	3
0.70 to 0.79.....	6	32	104	29	55	100	119	140	2
0.80 to 0.89.....	2	29	94	26	50	88	57	104	110
0.90 to 0.99.....	1	688	3,681	2	3	12	56	57	5
1.00 and over.....	8								
Undistributed <sup>2</sup> .....	15								
South Atlantic division, total.....	2,390	53,061	296,987	47,904	87,605	259,258	602,800	893,578	59,289
Less than 0.10.....	38	303	550	295	475	527	7,976	12,526	1,287
0.10 to 0.19.....	99	762	3,450	690	1,246	3,036	21,378	32,866	5,023
0.20 to 0.29.....	176	1,693	8,679	1,553	2,873	7,868	33,718	55,790	4,880
0.30 to 0.39.....	234	7,941	50,532	7,333	13,936	45,551	139,205	189,849	10,783
0.40 to 0.49.....	296	9,936	60,539	9,106	17,291	52,543	134,885	202,578	12,142
0.50 to 0.59.....	409	14,800	80,442	13,620	24,381	72,778	148,116	200,067	12,559
0.60 to 0.69.....	301	7,511	43,808	6,858	12,870	38,212	67,169	102,766	5,344
0.70 to 0.79.....	184	4,499	21,809	4,123	7,419	20,711	31,746	58,539	3,235
0.80 to 0.89.....	109	1,412	5,388	1,329	2,240	5,087	6,464	10,035	915
0.90 to 0.99.....	54	1,090	5,513	984	1,664	5,017	5,951	9,181	1,614
1.00 and over.....	237	2,018	7,724	1,854	2,948	7,137	6,223	13,244	1,083
Undistributed <sup>2</sup> .....	253	1,096	8,553	159	262	791	( <sup>3</sup> )	6,137	424
East South Central division, total...	1,658	28,240	139,755	25,662	44,686	123,414	307,202	475,789	37,264
Less than 0.10.....	33	166	402	156	223	354	7,327	14,617	529
0.10 to 0.19.....	55	1,183	7,938	1,106	2,211	7,420	46,531	59,653	2,598
0.20 to 0.29.....	117	1,941	11,411	1,767	3,339	10,345	44,941	73,749	7,092
0.30 to 0.39.....	126	2,080	11,171	1,896	3,397	9,957	32,842	53,672	2,713
0.40 to 0.49.....	153	2,756	11,977	2,616	4,472	11,078	27,695	39,065	2,691
0.50 to 0.59.....	273	8,098	36,461	7,492	12,202	33,402	66,323	86,826	4,250
0.60 to 0.69.....	246	5,383	29,267	4,849	8,819	25,048	45,354	77,178	4,286
0.70 to 0.79.....	96	2,536	11,616	2,299	3,903	10,156	15,747	23,098	1,385
0.80 to 0.89.....	93	2,511	13,042	2,220	3,982	10,970	15,487	29,331	8,731
0.90 to 0.99.....	36	616	2,226	564	1,059	2,356	5,145	5,145	233
1.00 and over.....	79	631	2,348	538	809	1,786	1,477	4,469	266
Undistributed <sup>2</sup> .....	351	339	1,896	159	270	880	1,122	8,986	2,490

See footnotes at end of table.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining, by Geographic Areas: 1963—Continued

Geographic area and ratio of payroll to value added in mining <sup>1</sup>	Estab- lishments  (number)	All employees		Production, development, and exploration workers			Value added in mining  (\$1,000)	Value of shipments and receipts  (\$1,000)	Capital expenditures  (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
1211.—BITUMINOUS COAL—Continued									
West South Central division, total...	40	453	2,430	421	773	2,215	5,513	7,381	820
0.10 to 0.19.....	1	121	777	113	214	723	2,785	3,884	334
0.20 to 0.29.....	5								
0.30 to 0.39.....	1								
0.40 to 0.49.....	8								
0.50 to 0.59.....	5								
0.60 to 0.69.....	4	93	453	91	193	443	720	1,119	81
0.80 to 0.89.....	1	116	604	106	168	556	464	508	2
1.00 and over.....	3								
Undistributed <sup>2</sup> .....	12	1	2	1	4	2	155	164	15
Mountain division, total.....	195	3,771	21,548	3,381	5,614	19,036	54,864	79,177	6,290
Less than 0.10.....	5	26	177	24	45	155	2,509	3,341	210
0.10 to 0.19.....	7	54	264	48	80	218	1,836	11,482	48
0.20 to 0.29.....	16	415	2,279	362	600	1,985	8,898	10,146	786
0.30 to 0.39.....	25	1,199	7,055	1,112	1,866	6,278	21,218	28,072	1,150
0.40 to 0.49.....	29	903	5,383	829	1,345	4,929	11,903	14,608	2,421
0.50 to 0.59.....	21	477	2,449	427	699	2,183	4,442	5,602	326
0.60 to 0.69.....	17	190	1,175	179	322	1,116	1,770	2,249	112
0.70 to 0.79.....	10	65	338	56	93	302	458	598	20
0.80 to 0.89.....	4	28	141	23	42	115	171	191	24
0.90 to 0.99.....	5	98	310	90	98	278	329	413	6
1.00 and over.....	17	250	1,556	220	406	1,440	1,094	2,136	1,129
Undistributed <sup>2</sup> .....	39	66	421	11	18	37	236	339	58
Pacific division, total.....	19	387	3,304	348	736	2,886	6,150	7,442	911
0.20 to 0.29.....	1	81	1,067	71	230	907	3,090	3,510	365
0.30 to 0.39.....	3								
0.40 to 0.49.....	1								
0.50 to 0.59.....	4								
1.00 and over.....	5	202	1,359	190	335	1,251	1,170	1,645	330
Undistributed <sup>2</sup> .....	5	6	34	-	-	-	70	80	16
1212.—LIGNITE									
Total.....	59	512	2,760	441	884	2,245	11,830	14,112	4,633
Less than 0.10.....	4	144	957	122	266	780	6,994	7,551	127
0.10 to 0.19.....	6								
0.20 to 0.29.....	6								
0.30 to 0.39.....	7								
0.40 to 0.49.....	6								
0.50 to 0.59.....	3	114	626	92	200	516	1,330	1,621	(D)
0.60 to 0.69.....	4	10	35	10	20	35	54	90	13
0.70 to 0.79.....	1	15	72	15	31	72	94	142	-
0.80 to 0.89.....	2								
1.00 and over.....	5								
Undistributed <sup>2</sup> .....	15	-	5	-	-	-	14	46	(D)
1213.—BITUMINOUS COAL MINING SERVICES									
Total.....	131	1,304	7,012	1,213	2,337	6,372	16,780	23,981	2,872
Less than 0.10.....	1	53	223	50	87	207	1,620	1,918	361
0.10 to 0.19.....	10								
0.20 to 0.29.....	21								
0.30 to 0.39.....	34								
0.40 to 0.49.....	19								
0.50 to 0.59.....	14	231	1,231	216	431	1,139	2,230	3,488	584
0.60 to 0.69.....	8	79	411	74	155	384	633	1,312	32
0.70 to 0.79.....	10	173	1,257	157	343	1,105	1,651	2,767	179
0.80 to 0.89.....	1	41	176	37	75	166	134	348	17
0.90 to 0.99.....	1								
1.00 and over.....	6								
Undistributed <sup>2</sup> .....	6	3	8	1	2	5	34	56	3

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>In computing these ratios contract or subcontract employment serving the establishment is excluded. The cost of contract work or subcontract work expressed as a percent of payroll for 1963 was: For Bituminous Coal, 9 percent; for Lignite, 10 percent; for Bituminous Coal Mining Services, 16 percent.

<sup>2</sup>Represents establishments with zero or negative value added; establishments with no employees; and for number of employees and payroll includes figures for separately reported central offices and related facilities.

<sup>3</sup>Not shown since cost of supplies, purchased fuels and electricity, contract work, and purchased machinery exceeds value of shipments and receipts plus capital expenditures.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963

Value added per employee class <sup>1</sup>	Number of employees	Number of establishments with average employment of--							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
1211.—BITUMINOUS COAL									
Total.....	132,046	6,115	4,972	649	202	191	87	13	1
Less than \$3,000.....	6,408	912	851	53	8	-	-	-	-
\$3,000 to \$3,999.....	4,698	489	430	49	7	3	-	-	-
\$4,000 to \$4,999.....	5,415	445	370	64	6	5	-	-	-
\$5,000 to \$5,999.....	5,877	470	399	57	11	1	-	2	-
\$6,000 to \$6,999.....	11,642	707	552	117	22	14	2	-	-
\$7,000 to \$7,999.....	4,806	374	313	39	14	7	1	-	-
\$8,000 to \$8,999.....	6,529	242	189	31	7	10	4	1	-
\$9,000 to \$9,999.....	11,954	253	169	38	17	13	14	1	1
\$10,000 to \$12,499.....	19,720	377	230	59	28	37	21	2	-
\$12,500 to \$14,999.....	17,817	244	135	27	25	35	20	2	-
\$15,000 to \$17,499.....	9,456	167	98	32	9	16	9	3	-
\$17,500 to \$19,999.....	8,803	135	70	33	10	11	9	2	-
\$20,000 and over.....	14,572	406	276	47	37	39	7	-	-
Undistributed <sup>2</sup> .....	4,349	894	890	3	1	-	-	-	-
1212.—LIGNITE									
Total.....	512	59	53	3	3	-	-	-	-
Less than \$3,000.....	15	7	7	-	-	-	-	-	-
\$3,000 to \$3,999.....	12	5	5	-	-	-	-	-	-
\$4,000 to \$4,999.....	8	1	1	-	-	-	-	-	-
\$5,000 to \$5,999.....	2	2	2	-	-	-	-	-	-
\$6,000 to \$6,999.....	17	4	4	-	-	-	-	-	-
\$7,000 to \$7,999.....	1	1	1	-	-	-	-	-	-
\$8,000 to \$8,999.....	37	1	1	-	-	-	-	-	-
\$9,000 to \$9,999.....	2	1	1	1	-	-	-	-	-
\$10,000 to \$12,499.....	62	5	4	-	1	-	-	-	-
\$12,500 to \$14,999.....	72	5	4	1	-	-	-	-	-
\$15,000 to \$17,499.....	151	2	1	-	1	-	-	-	-
\$17,500 to \$19,999.....	4	3	1	-	-	-	-	-	-
\$20,000 and over.....	138	5	4	-	1	-	-	-	-
Undistributed <sup>2</sup> .....	-	15	15	-	-	-	-	-	-
1213.—BITUMINOUS COAL MINING SERVICES									
Total.....	1,304	131	114	13	4	-	-	-	-
Less than \$3,000.....	25	5	5	-	-	-	-	-	-
\$3,000 to \$3,999.....	30	6	6	-	-	-	-	-	-
\$4,000 to \$4,999.....	17	7	7	-	-	-	-	-	-
\$5,000 to \$5,999.....	33	5	5	-	-	-	-	-	-
\$6,000 to \$6,999.....	45	4	3	1	-	-	-	-	-
\$7,000 to \$7,999.....	54	3	2	1	-	-	-	-	-
\$8,000 to \$8,999.....	113	8	6	2	-	-	-	-	-
\$9,000 to \$9,999.....	159	15	13	2	-	-	-	-	-
\$10,000 to \$12,499.....	349	25	20	4	1	-	-	-	-
\$12,500 to \$14,999.....	153	15	14	-	1	-	-	-	-
\$15,000 to \$17,499.....	44	7	6	1	-	-	-	-	-
\$17,500 to \$19,999.....	209	12	8	2	2	-	-	-	-
\$20,000 and over.....	73	13	13	-	-	-	-	-	-
Undistributed <sup>2</sup> .....	-	6	6	-	-	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>In computing these ratios contract or subcontract employment serving the establishment is excluded. The cost of contract or subcontract work expressed as a percent of payroll for 1963 was: For Bituminous Coal, 9 percent; for Lignite, 10 percent; for Bituminous Coal Mining Services, 16 percent.<sup>2</sup>Represents establishments with no employees or with negative value added in mining and, for number of employees, figures for separately reported central offices and related facilities.

TABLE 11. Hourly Earnings of Production, Development, and Exploration Workers for Establishments with 10 or More Employees, by Geographic Areas: 1963

Hourly earnings classes	Number of employees <sup>1</sup>	Number of establishments with 10 or more employees in--								
		Total	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
1211.—BITUMINOUS COAL										
Total.....	116,104	2,071	316	263	22	876	520	13	55	6
Less than \$1.00.....	1,607	75	9	8	1	27	28	1	-	1
\$1.00 to \$1.49.....	3,950	183	21	12	2	91	57	-	-	-
\$1.50 to \$1.99.....	9,113	354	43	25	4	189	88	2	2	1
\$2.00 to \$2.49.....	9,256	374	82	46	7	158	77	2	2	-
\$2.50 to \$2.99.....	13,905	410	55	44	-	156	144	3	8	-
\$3.00 to \$3.49.....	46,343	352	65	50	-	136	77	1	21	2
\$3.50 to \$3.99.....	26,723	218	34	43	8	79	34	4	15	1
\$4.00 to \$4.49.....	3,765	59	4	26	-	17	7	-	4	1
\$4.50 and over.....	1,388	41	3	9	-	18	8	-	3	-
No production, development, or exploration workers.....	54	5	-	-	-	5	-	-	-	-
1212.—LIGNITE										
Total.....	423	11	-	-	7	-	-	3	1	-
\$1.50 to \$1.99.....	} 147 {	3	-	-	1	-	-	2	-	-
\$2.00 to \$2.49.....		2	-	-	1	-	-	-	1	-
\$2.50 to \$2.99.....		3	-	-	3	-	-	-	-	-
\$3.00 to \$3.49.....		2	-	-	2	-	-	-	-	-
\$3.50 to \$3.99.....	} 151 {	1	-	-	-	-	-	1	-	-
1213.—BITUMINOUS COAL MINING SERVICES										
Total.....	995	43	17	6	-	15	4	-	1	-
\$1.00 to \$1.49.....	} 98 {	1	1	-	-	-	-	-	-	-
\$1.50 to \$1.99.....		7	3	-	-	3	1	-	-	-
\$2.00 to \$2.49.....		13	10	1	-	1	1	-	-	-
\$2.50 to \$2.99.....		6	1	2	-	2	1	-	-	-
\$3.00 to \$3.49.....	242	8	2	1	-	4	1	-	-	-
\$3.50 to \$3.99.....	105	5	-	2	-	2	-	-	1	-
\$4.00 to \$4.49.....	154	3	-	-	-	3	-	-	-	-

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>Excludes figures for separately reported central offices and related facilities.

TABLE 12. Distribution of Operating Companies, by Employment Size and by Number of Establishments: 1963

Establishment counts	Number of--		Number of establishments with average employment of--									
	Operating companies	Employees <sup>1</sup>	Total	0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
1211.—BITUMINOUS COAL												
Total.....	5,663	128,061	6,115	2,974	1,070	928	649	202	191	87	13	1
Multiunit companies, total.....	291	79,520	743	68	83	76	139	111	165	86	12	1
1 establishment <sup>2</sup> .....	150	8,669	150	19	20	21	48	19	15	8	-	-
2 establishments.....	69	10,288	138	20	20	18	28	23	16	11	2	-
3 or 4 establishments.....	40	11,125	131	12	20	14	28	16	27	14	-	-
5 or 6 establishments.....	15	7,851	81	8	17	17	6	7	11	13	-	-
7 to 9 establishments.....	10	13,531	83	4	-	1	14	13	34	14	3	-
10 to 14 establishments.....	2	14,128	24	-	-	1	1	7	11	3	1	-
15 to 19 establishments.....	2		36	2	2	-	3	5	8	10	5	1
20 or more establishments.....	3	13,928	100	3	4	4	11	21	43	13	1	-
Single unit companies.....	5,372	48,541	5,372	2,906	987	852	510	91	26	1	1	-
1212.—LIGNITE												
Total.....	52	512	59	42	6	5	3	3	-	-	-	-
Multiunit companies, total.....	7	383	14	3	1	5	3	2	-	-	-	-
1 establishment <sup>2</sup> .....	4	150	4	-	1	1	1	1	-	-	-	-
2 establishments.....	1		2	1	-	1	-	-	-	-	-	-
3 or 4 establishments.....	1	233	3	-	-	2	-	1	-	-	-	-
5 or 6 establishments.....	1		5	2	-	1	2	-	-	-	-	-
Single unit companies.....	45	129	45	39	5	-	-	1	-	-	-	-
1213.—BITUMINOUS COAL MINING SERVICES												
Total.....	131	1,304	131	57	31	26	13	4	-	-	-	-
Multiunit companies, total.....	10	145	10	1	4	3	1	1	-	-	-	-
1 establishment <sup>2</sup> .....	10	145	10	1	4	3	1	1	-	-	-	-
Single unit companies.....	121	1,159	121	56	27	23	12	3	-	-	-	-

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>Excludes figures for separately reported central offices and related facilities.<sup>2</sup>Represents companies having at least one establishment classified in other industries.

## OIL AND GAS EXTRACTION

This report shows 1963 Census of Mineral Industries statistics for establishments classified in Major Group 13, Oil and Gas Extraction. The separate industries included in this major group and the reports in which they appear are as follows:

SIC Code and Industry Title	Report
1311—Crude Petroleum and Natural Gas	MIC63(1)-13B
1321—Natural Gas Liquids	MIC63(1)-13C
1381—Drilling Oil and Gas Wells	} MIC63(1)-13D
1382—Oil and Gas Field Exploration Services	
1389—Oil and Gas Field Services,	
Not Elsewhere Classified	

### INDUSTRY DESCRIPTIONS

The Oil and Gas Extraction Industries represent establishments primarily engaged in the production of crude petroleum and natural gas, the recovery of oil and gas from oil sands and oil shale (no such activities were reported for 1963), and the production of natural gasoline and cycle condensate. Types of activities included are exploration, drilling, oil and gas well operation and maintenance, the operation of natural gasoline and cycle plants, and the mining and extraction of oil from oil sands and oil shale. This major group also includes such basic activities as emulsion breaking and desilting of crude petroleum to render the oil marketable. Pipeline transportation of petroleum, gasoline, and other petroleum products (except gathering lines) is classified in Major Group 46—Pipeline Transportation, and of natural gas in Major Group 49—Electric, Gas, and Sanitary Services. Establishments primarily engaged in petroleum refining and in the production of lubricating oils and greases are classified in Major Group 29—Petroleum Refining and Related Industries.

### SUMMARY OF FINDINGS

The combined value of shipments and receipts of all industries in Major Group 13 was \$14,512 million. Establishments in the Crude Petroleum and Natural Gas Industry accounted for \$9,894 million, the Natural Gas Liquids Industry for \$2,801 million, and the Oil and Gas Field Services Industries for \$1,818 million. These figures represent the gross value of shipments and receipts. Figures for the Natural Gas Liquids Industry duplicate, in part, those for the Crude Petroleum and Natural Gas Industry due to the inclusion in shipments from the Natural Gas Liquids Industry of residue gas which was reported, prior to processing, as a shipment from the Crude Petroleum and Natural Gas Industry. Likewise, figures for the Natural Gas Liquids Industry contain some duplication due to the transfer of natural gas liquids from one establishment to another within the industry for further processing. Also, industries in the group contain some duplication due to the inclusion of products purchased and resold without further processing. When adjustments are made to eliminate these duplications, the value of net shipments is obtained, amounting, for the Oil and Gas Extraction Industries as a whole, to \$12,423 million and, for the Natural Gas Liquids Industry, to \$808 million.

Table 1 of this report presents comparative general statistics for all Oil and Gas Extraction Industries combined for the census years 1860 to 1963. The first well was drilled for oil in the United States in 1859. Table 2A presents general statistics by 3-digit industry groups for the United States and for geographic divisions and States. Table 2B presents some cost, capital, and product details for the Oil and Gas Extraction Industries for selected geographic divisions and States. In table 3, detailed statistics are shown for the United States by 4-digit industry, including figures for the number, footage, and cost of drilling and equipping wells drilled in the United States. Table 4 shows selected statistics for establishments classified by employment size for all Oil and Gas Extraction Industries and 3-digit industry groups and includes the number of oil and gas extraction establishments by employment size and State.

## COVERAGE

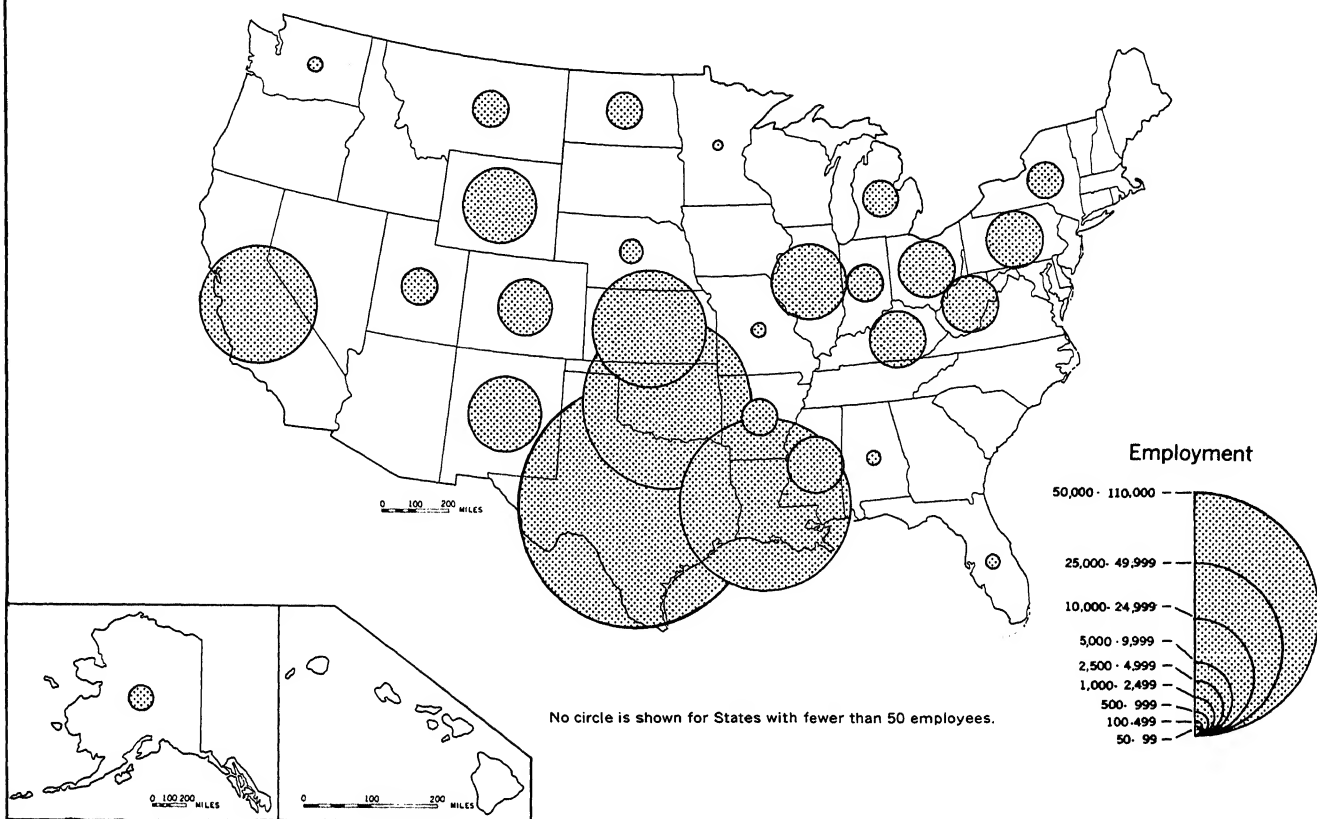
An establishment operating oil or gas field properties, for census purposes, is defined as all oil and gas field activities of an operating company in an entire State. Separate reports were required for each State in which a company operated oil or gas field properties except for Louisiana, Texas, and New Mexico, where separate reports were required by district. (Separate subindustry statistics were tabulated for establishments primarily engaged in producing crude petroleum and natural gas, respectively.) These subindustry statistics are shown in table 3 and in the report, Crude Petroleum and Natural Gas. Separate reports were required for each natural gas liquids plant.

Companies engaged in oil and gas field services, in general, were permitted to file one report for all oil and gas field services performed in the United States, a service establishment representing the activities covered in such a report. Service establishments were classified in the separate service industries and subindustries on the basis of the principal kind of work performed as measured by receipts for such services. (The report, Oil and Gas Field Services, contains separate subindustry statistics for establishments primarily engaged in performing 16 different types of work.)

Companies primarily performing oil and gas field services but also operating oil and gas properties were required to file separate reports for each State in which oil and gas properties were operated, and for each district in Louisiana, Texas, and New Mexico. Such reports were classified on the basis of whether receipts from production or service activities in the State were greater and, for companies primarily engaged in performing services, by principal type of service performed.

# OIL AND GAS EXTRACTION

## Distribution of Employment by State: 1963



## Employment and Production: 1840-1963

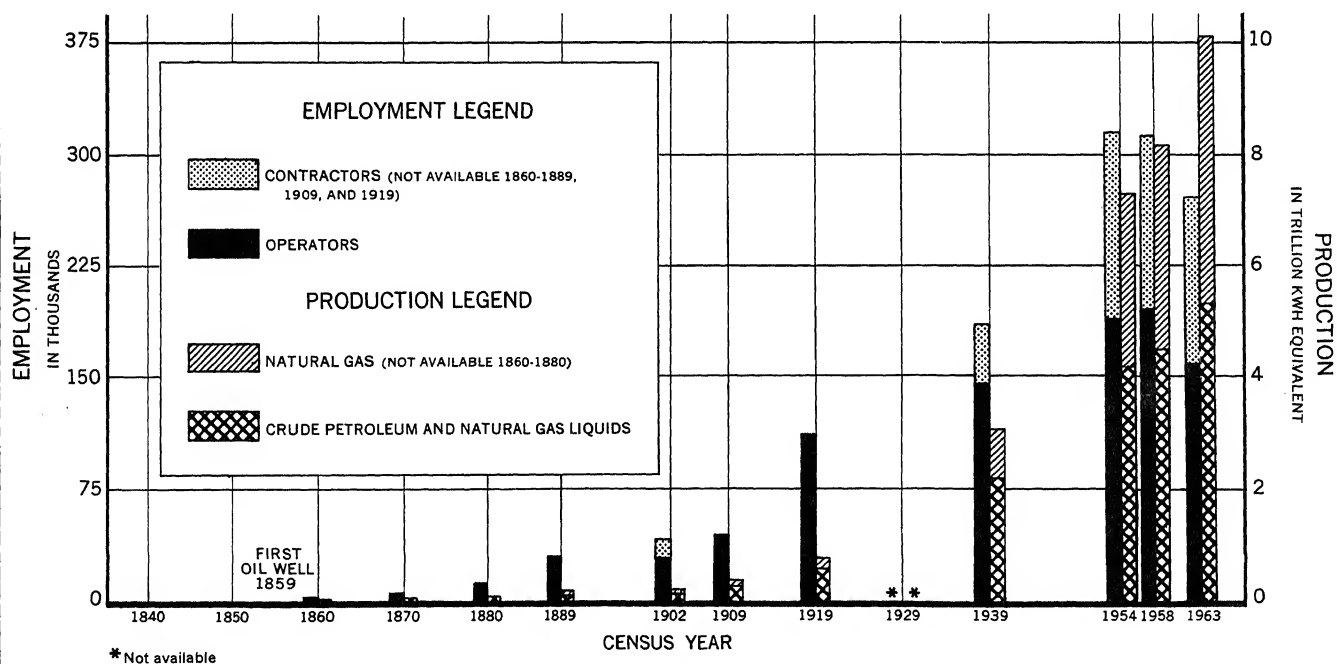




TABLE 1. General Statistics: 1963 and Earlier Years

(For explanation of column captions see appendix A. For more detailed historical statistics for these industries, see table 1 of the corresponding chapter of the 1954 Census of Mineral Industries, Vol. 1.)

Industry and year	Operating companies (number)	Establishments (number)		All employees		Production, development, and exploration workers			Selected expenses (\$1,000)				Value of shipments and receipts (\$1,000)	Value of net shipments and receipts <sup>1</sup> (\$1,000)	Capital expenditures (\$1,000)	Energy used—min. equivalent (million kwh)	Horse power rating of power equipment (1,000)
		Total	With 20 employees or more	Total	Payroll (\$1,000)	Total	Man-hours	Wages (\$1,000)	Value added in mining (\$1,000)	Supplies, purchases for re-sale, and electric	Natural gas and natural gas liquids received for processing <sup>2</sup>	Contract or subcontract work	Purchased machinery installed				
1963:																	
Oil and gas extraction, total.	16,339	21,242	2,448	271,476	1,744,771	191,976	397,348	1,093,048	11,019,796	1,800,894	1,953,875	1,641,513	648,073	14,423,459	2,551,692	329,344	28,309
Crude petroleum and natural gas.....	10,594	14,378	954	145,244	1,016,431	83,444	166,305	494,910	9,016,372	1,179,536	(X)	1,486,535	421,290	9,893,763	2,209,930	146,168	14,235
Natural gas liquids.....	164	652	245	13,859	96,553	11,939	24,455	80,745	762,070	105,620	1,953,875	54,025	39,068	2,800,802	113,856	158,705	3,887
Oil and gas field services.....	5,915	6,212	1,249	112,373	631,727	96,593	206,588	517,393	1,241,354	515,738	(X)	100,953	187,755	1,817,894	227,906	24,471	10,187
1958:																	
Oil and gas extraction, total.	15,384	18,522	2,691	312,916	1,700,683	214,001	440,256	1,011,238	9,032,493	1,586,734	992,386	1,565,195	655,141	11,637,902	2,194,047	310,373	(NA)
Crude petroleum and natural gas.....	9,852	12,010	1,093	180,121	1,043,108	102,485	201,009	497,867	7,339,922	1,055,041	(X)	1,455,267	486,886	9,385,906	1,947,634	137,480	(NA)
Natural gas liquids.....	176	593	290	16,514	96,319	13,445	26,947	75,739	587,580	55,243	992,386	44,983	39,836	1,625,098	94,930	142,130	(NA)
Oil and gas field services.....	5,686	5,919	1,308	116,281	561,256	98,071	212,300	437,632	1,107,787	476,450	(X)	64,945	128,419	1,625,883	151,483	30,763	(NA)
1954:																	
Oil and gas extraction, total.	15,105	17,591	2,768	315,808	1,462,832	235,518	491,793	976,785	7,673,694	1,300,928	2,172,921	1,559,034	865,067	2,303,411	2,228,204	285,113	21,104
Crude petroleum and natural gas.....	9,720	11,508	1,042	172,506	835,740	109,792	216,381	459,955	6,129,213	799,483	(X)	1,458,807	621,048	7,070,062	1,898,454	141,655	9,123
Natural gas liquids.....	181	562	287	17,340	85,097	13,560	27,862	63,983	425,937	49,045	2,172,921	36,726	65,752	2,640,422	109,959	113,449	2,902
Oil and gas field services.....	5,463	5,515	1,437	125,889	543,646	112,131	247,275	452,657	1,118,544	491,648	(X)	62,326	176,405	1,577,017	217,903	29,992	8,076
1939: <sup>3</sup>																	
Oil and gas extraction, total.	9,348	10,909	(NA)	186,150	318,382	148,996	265,028	220,435	2,242,473	221,430	(NA)	2,203,018	(NA)	(NA)	(NA)	(NA)	5,101
Crude petroleum and natural gas.....	8,061	8,605	(NA)	136,051	234,899	105,505	190,674	155,700	1,071,989	104,931	(X)	199,034	(NA)	1,375,954	(NA)	92,788	3,397
Natural gas liquids.....	295	685	(NA)	10,337	18,264	8,332	16,634	13,212	1,170,484	15,608	(NA)	3,984	(NA)	96,338	13,030	54,979	772
Oil and gas field services.....	1,619	1,619	(NA)	39,762	65,219	35,159	57,720	51,523	(NA)	(NA)	(X)	(NA)	(NA)	(NA)	(NA)	(NA)	932
Crude petroleum and natural gas and natural gas liquids only:																	
1913: <sup>4</sup>	(NA)	9,970	(NA)	111,611	169,276	93,659	(NA)	135,397	613,744	219,133	28,814	70,102	(NA)	931,793	(NA)	64,431	1,827
1909.....	8,053	8,202	(NA)	43,990	35,553	37,603	(NA)	28,094	111,960	46,528	59,889	17,040	(NA)	175,528	(NA)	1,231	(NA)
1907.....	31,736	(NA)	(NA)	27,558	21,319	822,438	(NA)	16,392	59,022	24,966	(NA)	18,278	(NA)	102,266	(NA)	1,014	(NA)
1889.....	(NA)	(NA)	(NA)	29,223	10,283	26,911	(NA)	8,748	15,318	22,690	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1880 <sup>5</sup> .....	(NA)	(NA)	(NA)	11,177	7,179	(NA)	(NA)	(NA)	163,174	17,697	(NA)	113,730	(NA)	24,601	(NA)	(NA)	(NA)
1870.....	(NA)	(NA)	(NA)	4,488	3,995	(NA)	(NA)	(NA)	17,902	1,402	(NA)	(NA)	(NA)	19,304	(NA)	(NA)	23
1860 <sup>15</sup> .....	(NA)	64	(NA)	922	339	(NA)	(NA)	(NA)	2,088	2,167	(NA)	(NA)	(NA)	4,255	(NA)	(NA)	(NA)

Standard Notes: - Represents zero.

<sup>1</sup>Represents gross shipments and receipts less the value of residue gas shipped from natural gas liquids plants and the cost of natural gas liquids received for processing at such plants and less residues of products purchased for resale without further processing.<sup>2</sup>For 1954 and 1959, no data were obtained on the value of gas received for processing at natural gas liquids plants or on the value of residue gas sold or transferred. However, for 1954 the estimated value (prior to processing) of natural gas liquids contained in such gas was included with the value of natural gas liquids received for processing and used in computing value added. No figures for the value of residue gas are included in the value of shipments and receipts shown for 1954. For 1939, the cost of supplies, purchases for resale and purchased fuels and electric energy for all oil and gas extraction industries includes the estimated cost of such items and subcontract work to the oil and gas field services industries, for which such data were not requested in 1939. These estimates are used in computing value added for such industries. For Alaska in 1958 and 1959, the cost of supplies, purchased fuels and electric energy, contract work, and purchased machinery installed exceeded value of shipments and capital expenditures.<sup>3</sup>Excludes figures for Alaska. Only one such producing establishment was reported for 1919.<sup>4</sup>Data for 2 nonproducing natural gas liquids plants are included with data for the Crude Petroleum and Natural Gas Industry.<sup>5</sup>Represents natural gas purchased as a material or for resale.<sup>6</sup>Includes purchased electric energy. For 1939, the quantity of purchased electric energy amounted to less than one percent of the total kwh equivalent of energy used.<sup>7</sup>For 1902, data were also obtained from the operators of oil and gas field properties on the average number of employees at contract services operations performed for them. The total number of such employees was reported as 12,143.<sup>8</sup>Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.<sup>9</sup>Includes natural gas operations. Although natural gas was used widely in 1880, it was still of relatively little commercial importance.<sup>10</sup>Represents the cost of drive-pipe casing, tubing, and torpedoes.<sup>11</sup>Represents the "cost of drilling." It is indicated in the 1880 census report that drilling was usually done by contractors.<sup>12</sup>Reported as "oil, coal" and probably includes some refining as well as the production of crude petroleum, or may represent primarily the recovery of oil from coal.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958

(For explanation of column captions see appendix A)

Ind. code	Industry group and geographic area	1963											1958	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Payroll	Total	Total	Man-hours	Wages						
		(number)	(number)	(\$1,000)	(number)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
13	United States, total.....	21,242	2,448	271,476	1,744,711	191,976	397,348	1,093,048	11,019,796	6,044,355	14,512,459	2,551,692	312,916	9,032,493
131	Crude petroleum and natural gas	14,378	954	145,244	1,016,431	83,444	166,305	494,910	9,016,372	3,087,321	9,893,763	2,209,930	180,121	17,339,922
132	Natural gas liquids....	652	245	13,859	96,553	11,939	24,455	80,745	762,070	2,152,588	2,800,802	113,856	16,514	587,580
138	Oil and gas field services.....	6,212	1,249	112,373	631,727	96,593	206,588	517,393	1,241,354	804,446	1,817,894	227,906	116,281	11,107,787
13	Middle Atlantic.....	931	39	5,711	30,125	3,878	7,946	18,002	59,836	28,731	71,240	17,327	6,577	59,217
131	Crude petroleum and natural gas..	746	30	4,702	25,340	2,966	5,871	13,690	50,413	22,386	56,512	16,287	5,191	45,906
13	New York, total...	190	6	1,046	6,900	651	1,380	3,314	9,592	5,118	11,408	3,302	1,094	7,447
131	Crude petroleum and natural gas	160	5	864	5,857	494	999	2,423	7,970	4,347	9,135	3,182	987	6,725
138	Oil and gas field services.	30	1	182	1,043	157	381	891	1,622	771	2,273	120	107	722
13	Pennsylvania.....	741	33	4,665	23,225	3,227	6,566	14,688	50,244	23,613	59,832	14,025	5,483	51,770
131	Crude petroleum and natural gas	586	25	3,838	19,483	2,472	4,872	11,267	42,443	18,039	47,377	13,105	4,204	39,181
13	East North Central..	2,236	125	12,483	62,990	10,065	19,236	46,880	331,985	213,617	493,268	52,334	16,320	305,524
131	Crude petroleum and natural gas..	1,675	78	7,975	42,621	5,993	11,483	28,541	277,357	96,560	330,230	43,687	11,318	256,394
13	Ohio, total.....	655	23	2,578	12,482	2,020	3,979	8,843	31,691	21,546	41,616	11,621	3,926	23,588
131	Crude petroleum and natural gas	499	13	1,573	7,686	1,101	2,117	4,355	20,833	15,941	26,347	10,427	3,018	17,649
138	Oil and gas field services.	156	10	1,005	4,796	919	1,862	4,488	10,858	5,605	15,269	1,194	(NA)	(NA)
13	Indiana, total....	353	12	1,506	7,475	1,047	1,813	3,977	24,965	16,523	37,213	4,275	1,649	28,794
131	Crude petroleum and natural gas	284	7	1,042	5,698	628	1,087	2,406	21,705	14,709	32,574	3,840	1,179	25,323
138	Oil and gas field services.	69	5	464	1,777	419	726	1,571	3,260	1,814	4,639	435	470	3,471
13	Illinois.....	937	70	6,473	31,629	5,445	10,447	25,222	215,238	140,200	331,979	23,459	9,017	229,372
131	Crude petroleum and natural gas	683	43	4,268	22,507	3,474	6,643	17,146	186,903	50,702	216,457	21,148	6,089	195,517
13	Michigan.....	291	20	21,926	211,404	1,553	2,997	8,838	60,091	35,348	82,460	12,979	1,728	23,770
131	Crude petroleum and natural gas	209	15	21,092	26,730	790	1,636	4,634	47,916	15,208	54,852	8,272	1,032	17,905
13	West North Central..	1,876	173	14,567	76,651	11,542	23,206	56,846	536,945	309,741	740,748	105,938	16,946	448,647
131	Crude petroleum and natural gas..	1,254	94	8,494	47,548	6,277	12,709	32,491	455,917	150,722	527,043	79,596	10,958	384,190
13	Missouri.....	22	1	226	1,389	28	53	179	529	293	737	85	(NA)	(NA)
13	North Dakota.....	96	14	1,090	6,738	843	1,791	5,113	67,163	28,872	83,549	12,486	1,436	33,965
131	Crude petroleum and natural gas	62	3	428	2,903	281	587	1,815	54,999	20,301	64,798	10,502	558	22,352
13	South Dakota.....	13	-	13	67	11	23	61	112	1,604	705	1,011	(NA)	(NA)
13	Nebraska.....	179	11	933	5,473	730	1,454	4,083	57,695	21,813	70,748	8,760	1,086	54,743
131	Crude petroleum and natural gas	121	4	391	2,533	292	593	1,802	50,017	15,089	57,848	7,258	569	48,869
132	Natural gas liquids.....	6	-	63	443	57	129	395	1,469	6,724	{ 4,340 } 8,560	1,502	517	5,874
138	Oil and gas field services.	52	7	479	2,497	381	732	1,886	6,209					
13	Kansas.....	1,566	147	12,225	62,292	9,930	19,885	47,410	411,446	257,159	585,009	83,596	13,939	359,492
131	Crude petroleum and natural gas	1,047	86	7,394	40,191	5,696	11,509	28,830	350,739	113,645	403,579	60,805	9,370	312,879
132	Natural gas liquids.....	19	6	303	1,895	272	589	1,645	16,600	119,910	120,100	16,410	328	11,788
138	Oil and gas field services.	500	55	4,528	20,206	3,962	7,787	16,935	44,107	23,604	61,330	6,381	4,241	34,825

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958—Continued

1963													1958	
Ind. code	Industry group and geographic area	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages						
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)						
13	South Atlantic, total	1,081	39	5,044	23,112	4,062	8,195	17,450	77,757	151,252	199,054	29,955	5,376	55,168
131	Crude petroleum and natural gas..	878	20	3,438	15,150	2,598	5,098	10,354	52,060	36,550	61,472	27,138	3,975	40,498
132	Natural gas liquids.....	26	6	305	1,943	278	561	1,731	13,144	107,196	119,250	1,090	343	8,501
138	Oil and gas field services.....	177	13	1,301	6,019	1,186	2,536	5,365	12,553	7,506	18,332	1,727	1,058	6,169
13	Virginia.....	7	-	7	49	6	12	37	771	118	862	27	41	555
13	West Virginia.....	1,055	38	4,787	21,172	3,979	8,021	17,003	72,893	106,404	151,197	28,100	5,162	53,793
131	Crude petroleum and natural gas	858	20	3,238	13,525	2,564	5,033	10,171	50,212	34,778	58,855	26,135	3,789	39,382
13	Florida:													
131	Crude petroleum and natural gas	10	-	149	1,099	22	42	123	587	1,257	1,356	488	134	( <sup>3</sup> )
13	East South Central, total.....	1,051	98	8,821	46,166	7,016	13,715	33,144	289,555	191,163	421,234	59,484	9,710	207,129
131	Crude petroleum and natural gas..	693	42	4,592	26,514	3,133	6,095	15,621	237,310	95,388	281,517	51,181	5,393	170,708
132	Natural gas liquids.....	11	5	230	1,605	193	388	1,261	14,050	64,551	77,806	795	230	9,011
138	Oil and gas field services.....	347	51	3,999	18,047	3,690	7,232	16,262	38,195	31,224	61,911	7,508	4,087	27,410
13	Kentucky.....	689	38	3,987	16,969	3,402	6,416	13,869	77,416	75,068	136,083	16,401	4,904	68,345
131	Crude petroleum and natural gas	455	20	2,566	11,267	2,111	3,930	8,851	58,780	24,704	69,283	14,201	3,091	51,640
132	Natural gas liquids.....	5	3	144	957	118	238	755	9,668	45,062	54,586	144	173	8,023
138	Oil and gas field services.	229	15	1,277	4,745	1,173	2,248	4,263	8,968	5,302	12,214	2,056	1,640	8,682
13	Tennessee.....	19	-	21	61	16	33	45	200	222	398	24	19	43
13	Alabama.....	41	4	406	2,440	339	837	1,927	19,392	15,369	29,614	5,147	338	12,063
131	Crude petroleum and natural gas	27	1	132	857	80	205	462	15,567	9,291	20,404	4,454	222	11,357
138	Oil and gas field services.	14	3	274	1,583	259	632	1,465	3,825	6,078	9,210	693	116	706
13	Mississippi.....	302	56	4,407	26,696	3,259	6,429	17,303	192,547	100,504	255,139	37,912	4,449	126,678
131	Crude petroleum and natural gas	198	21	1,886	14,352	939	1,954	6,286	162,838	61,203	191,529	32,512	2,071	107,714
132	Natural gas liquids.....	6	2	86	648	75	150	506	4,382	19,489	23,220	651	57	988
138	Oil and gas field services.	98	33	2,435	11,696	2,245	4,325	10,511	25,327	19,812	40,390	4,749	2,321	17,976
13	West South Central, total.....	11,360	1,566	181,754	1,195,971	124,251	262,372	712,967	7,543,895	4,099,196	9,859,132	1,783,959	209,976	5,931,822
131	Crude petroleum and natural gas..	7,499	525	91,004	664,351	47,283	95,115	286,077	6,060,004	2,051,519	6,585,864	1,525,659	112,039	4,654,605
132	Natural gas liquids.....	458	183	10,213	70,515	8,679	17,815	57,841	587,915	1,436,416	1,943,936	80,395	12,275	440,047
138	Oil and gas field services.....	3,403	858	80,537	461,105	68,289	149,442	369,049	895,976	611,261	1,329,332	177,905	85,662	837,170
13	Arkansas, total...	285	30	2,244	11,195	1,843	3,570	8,595	67,874	42,452	96,547	13,779	2,806	80,331
131	Crude petroleum and natural gas	212	13	1,207	6,688	891	1,878	4,571	58,488	22,869	68,982	12,375	1,905	70,497
132	Natural gas liquids.....	6	2	139	876	117	227	692	2,336	14,483	16,701	118	205	4,114
138	Oil and gas field services.	67	15	898	3,631	835	1,465	3,332	7,050	5,100	10,864	1,286	696	5,720
13	Louisiana, total..	1,352	318	42,406	294,726	32,367	71,219	202,563	2,557,167	1,488,270	3,315,184	730,253	42,398	1,458,127
131	Crude petroleum and natural gas	743	82	17,061	131,823	10,603	22,207	72,978	2,107,158	758,866	2,236,901	629,123	20,532	1,181,307
132	Natural gas liquids.....	72	25	1,472	10,085	1,221	2,595	7,988	154,851	496,919	636,722	15,048	1,208	56,550
138	Oil and gas field services.	537	211	23,873	152,818	20,543	46,417	121,597	295,158	232,485	441,561	86,082	20,658	220,270

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958—Continued

Ind. code	Industry group and geographic area	1963											1958	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages						
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
	West South Central—Continued													
13	North Louisiana, total.....	642	91	6,301	35,431	4,992	10,300	25,448	258,953	185,395	388,152	56,196	(NA)	(NA)
131	Crude petroleum and natural gas	451	36	3,089	19,045	2,135	4,441	11,600	208,899	69,010	228,692	49,217	(NA)	(NA)
132	Natural gas liquids.....	25	9	617	4,111	482	1,020	2,884	22,934	98,902	120,192	1,644	(NA)	(NA)
138	Oil and gas field services.	166	46	2,595	12,275	2,375	4,839	10,964	27,120	17,483	39,268	5,335	(NA)	(NA)
13	South Louisiana, total.....	710	227	36,105	259,295	27,375	60,919	177,115	2,298,214	1,302,875	2,927,032	674,057	(NA)	(NA)
131	Crude petroleum and natural gas	292	46	13,972	112,778	8,468	17,766	61,378	1,898,259	689,856	2,008,209	579,906	(NA)	(NA)
132	Natural gas liquids.....	47	16	855	5,974	739	1,575	5,104	131,917	398,017	516,530	13,404	(NA)	(NA)
138	Oil and gas field services.	371	165	21,278	140,543	18,168	41,578	110,633	268,038	215,002	402,293	80,747	(NA)	(NA)
13	Oklahoma, total....	2,360	272	31,009	190,949	19,741	38,178	98,707	785,378	426,104	1,009,130	202,352	35,926	653,855
131	Crude petroleum and natural gas	1,603	106	18,625	126,772	9,822	18,694	51,580	627,365	254,198	705,537	176,026	22,933	523,960
132	Natural gas liquids.....	75	24	1,732	12,041	1,224	2,463	8,013	69,967	117,453	176,720	10,700	2,283	49,926
138	Oil and gas field services.	682	142	10,652	52,136	8,695	17,021	39,114	88,046	54,453	126,873	15,626	10,710	79,969
13	Texas, total.....	7,363	946	106,095	699,101	70,300	149,405	403,102	4,133,476	2,142,370	5,438,271	837,575	128,846	3,739,509
131	Crude petroleum and natural gas	4,941	324	54,111	399,068	25,967	52,336	156,948	3,266,993	1,015,586	3,574,444	708,135	66,669	2,878,841
132	Natural gas liquids.....	305	132	6,870	47,513	6,117	12,530	41,148	360,761	807,561	1,113,793	54,529	8,579	329,457
138	Oil and gas field services.	2,117	490	45,114	252,520	38,216	84,539	205,006	505,722	319,223	750,034	74,911	53,598	531,211
13	Texas Gulf Coast A, total.....	771	157	22,766	176,109	10,686	22,388	64,841	694,036	383,174	962,162	115,048	(NA)	(NA)
131	Crude petroleum and natural gas..	425	57	14,770	128,927	4,238	8,693	29,291	548,556	156,411	607,259	97,708	(NA)	(NA)
132	Natural gas liquids.....	39	18	1,149	8,378	1,000	2,021	6,942	77,362	188,691	260,165	5,888	(NA)	(NA)
138	Oil and gas field services.....	307	82	6,847	38,804	5,448	11,674	28,608	68,118	38,072	94,738	11,452	(NA)	(NA)
13	Texas Gulf Coast B, total.....	411	53	3,473	20,709	2,861	5,882	16,411	266,320	138,457	362,016	42,761	(NA)	(NA)
131	Crude petroleum and natural gas..	291	19	1,608	10,624	1,191	2,427	7,553	233,156	57,498	251,476	39,178	(NA)	(NA)
132	Natural gas liquids.....	23	9	386	2,623	340	692	2,291	18,689	72,195	89,319	1,565	(NA)	(NA)
138	Oil and gas field services.....	97	25	1,479	7,462	1,330	2,763	6,567	14,475	8,764	21,221	2,018	(NA)	(NA)
13	South Texas, total.....	571	103	8,550	54,594	6,214	13,267	36,603	432,227	276,346	609,149	99,424	(NA)	(NA)
131	Crude petroleum and natural gas..	331	32	3,934	29,061	2,256	4,530	14,561	342,667	105,488	360,235	87,920	(NA)	(NA)
132	Natural gas liquids.....	34	15	930	6,673	864	1,817	5,993	51,471	149,379	194,553	6,297	(NA)	(NA)
138	Oil and gas field services.....	206	56	3,686	18,860	3,094	6,920	16,049	38,089	21,479	54,361	5,207	(NA)	(NA)
13	Southwest Texas, total.....	368	26	2,545	13,311	1,827	3,819	8,792	76,300	31,268	94,389	13,179	(NA)	(NA)
131	Crude petroleum and natural gas..	277	9	1,270	7,810	777	1,543	4,259	64,189	19,754	72,023	11,920	(NA)	(NA)
132	Natural gas liquids.....	6	2	77	497	70	151	452	2,399	6,341	8,645	95	(NA)	(NA)
138	Oil and gas field services.....	85	15	1,198	5,004	980	2,125	4,081	9,712	5,173	13,721	1,164	(NA)	(NA)

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958—Continued

Ind. code	Industry group and geographic area	1963											1958	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages						
	West South Central—Continued													
13	North Central													
131	Texas A, total.	1,064	70	6,775	32,811	5,356	10,596	24,148	211,268	91,581	251,413	51,436	(NA)	(NA)
	Crude petroleum and													
132	natural gas..	797	33	3,883	20,571	2,792	5,698	13,282	177,939	70,406	200,975	47,370	(NA)	(NA)
	Natural gas liquids.....	17	5	275	1,630	247	493	1,399	9,607	9,945	18,726	826	(NA)	(NA)
138	Oil and gas field services.....	250	32	2,617	10,610	2,317	4,405	9,467	23,722	11,230	31,712	3,240	(NA)	(NA)
13	North Central													
131	Texas B, total.	739	54	4,258	21,346	3,525	7,103	16,570	143,571	68,313	178,683	33,201	(NA)	(NA)
	Crude petroleum and													
132	natural gas..	544	29	2,429	13,148	1,874	3,593	9,232	120,297	39,514	130,325	29,486	(NA)	(NA)
	Natural gas liquids.....	29	8	376	2,268	318	688	1,983	10,112	22,010	29,874	2,248	(NA)	(NA)
138	Oil and gas field services.....	166	17	1,453	5,930	1,333	2,822	5,355	13,162	6,789	18,484	1,467	(NA)	(NA)
13	East Texas A, total.....	345	39	8,216	60,507	3,306	7,053	18,302	129,817	62,788	154,502	38,103	(NA)	(NA)
131	Crude petroleum and													
132	natural gas..	246	13	5,520	44,998	836	1,619	4,375	92,005	29,626	91,087	30,544	(NA)	(NA)
	Natural gas liquids.....	12	4	137	929	130	273	900	9,100	18,460	23,226	4,334	(NA)	(NA)
138	Oil and gas field services.....	87	22	2,559	14,580	2,340	5,161	13,027	28,712	14,702	40,189	3,225	(NA)	(NA)
13	East Texas B, total.....	694	89	7,460	42,991	5,820	11,915	30,938	342,510	159,509	459,341	42,678	(NA)	(NA)
131	Crude petroleum and													
132	natural gas..	507	33	4,133	25,752	2,905	5,841	16,379	295,173	61,058	321,859	34,372	(NA)	(NA)
	Natural gas liquids.....	30	19	777	5,321	682	1,441	4,409	24,963	87,393	106,636	5,720	(NA)	(NA)
138	Oil and gas field services.....	157	37	2,550	11,918	2,233	4,633	10,150	22,374	11,058	30,846	2,586	(NA)	(NA)
13	West Texas A, total.....	1,528	256	33,531	225,068	24,171	53,599	147,749	1,431,926	628,710	1,773,012	287,624	(NA)	(NA)
131	Crude petroleum and													
132	natural gas..	939	65	12,631	92,745	6,623	13,443	42,609	1,088,931	346,198	1,202,905	232,224	(NA)	(NA)
	Natural gas liquids.....	63	29	1,554	10,914	1,430	2,854	9,808	93,033	104,338	180,578	16,793	(NA)	(NA)
138	Oil and gas field services.....	526	162	19,346	121,409	16,118	37,302	95,332	249,962	178,174	389,529	38,607	(NA)	(NA)
13	West Texas B, total.....	380	33	2,616	15,290	2,214	4,558	12,728	133,104	91,162	175,116	49,150	(NA)	(NA)
131	Crude petroleum and													
132	natural gas..	269	8	915	5,838	715	1,388	4,281	105,117	56,069	118,379	42,807	(NA)	(NA)
	Natural gas liquids.....	20	8	355	2,337	305	627	2,006	11,227	25,085	33,411	2,901	(NA)	(NA)
138	Oil and gas field services.....	91	17	1,346	7,115	1,194	2,543	6,441	16,760	10,008	23,326	3,442	(NA)	(NA)
13	Texas Panhandle, total.....	492	66	5,905	36,365	4,320	9,225	26,020	272,397	211,062	418,488	64,971	(NA)	(NA)
131	Crude petroleum and													
132	natural gas..	315	26	3,018	19,594	1,760	3,561	11,126	198,963	73,564	217,921	54,606	(NA)	(NA)
	Natural gas liquids.....	32	15	854	5,943	731	1,473	4,965	52,798	123,724	168,660	7,862	(NA)	(NA)
138	Oil and gas field services.....	145	25	2,033	10,828	1,829	4,191	9,929	20,636	13,774	31,907	2,503	(NA)	(NA)

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958—Continued

Ind. code	Industry group and geographic area	1963										1958		
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages						
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
13	Mountain.....	1,827	255	21,595	143,880	15,677	32,685	96,384	1,116,421	565,272	1,407,337	274,356	24,636	973,962
131	Crude petroleum and natural gas..	1,109	114	11,496	85,966	6,610	13,194	44,706	969,292	345,509	1,062,182	252,619	14,501	841,888
132	Natural gas liquids.....	60	23	1,179	8,095	1,062	2,179	7,295	47,207	160,143	200,062	7,288	1,205	39,408
138	Oil and gas field services.....	658	118	8,920	49,819	8,005	17,312	44,383	99,922	59,620	145,093	14,449	8,930	92,671
13	Montana.....	235	29	2,277	14,355	1,667	3,661	9,951	72,281	48,198	93,820	26,659	2,190	70,239
131	Crude petroleum and natural gas	158	14	1,110	7,787	667	1,301	4,230	59,045	39,364	73,930	24,479	1,597	63,121
13	Wyoming.....	411	60	5,296	38,259	3,912	8,287	26,385	369,409	135,932	435,738	69,603	6,093	299,175
131	Crude petroleum and natural gas	205	26	2,918	23,391	1,775	3,591	13,153	334,324	94,297	364,782	63,839	3,710	272,602
132	Natural gas liquids.....	17	3	240	1,709	230	448	1,646	8,610	25,132	32,141	1,601	250	3,990
138	Oil and gas field services.	189	31	2,138	13,159	1,907	4,248	11,586	26,475	16,503	38,815	4,163	2,133	22,583
13	Colorado.....	356	36	3,634	28,376	1,927	4,063	13,185	125,489	50,470	151,170	24,789	5,252	151,420
131	Crude petroleum and natural gas	237	25	2,702	22,831	1,108	2,229	8,319	109,921	32,346	119,650	22,617	3,665	132,435
132	Natural gas liquids.....	7	2	123	879	115	241	831	4,829	13,141	17,264	706	(NA)	(NA)
138	Oil and gas field services.	112	9	809	4,666	704	1,593	4,035	10,739	4,983	14,256	1,466	(NA)	(NA)
13	New Mexico.....	682	111	8,972	53,941	7,081	14,239	40,356	448,211	273,490	599,830	121,871	9,030	381,223
131	Crude petroleum and natural gas	420	41	4,215	27,903	2,752	5,465	16,890	376,268	137,213	401,682	111,799	4,605	314,428
132	Natural gas liquids.....	31	18	767	5,170	675	1,401	4,513	31,344	111,757	138,726	4,375	771	28,851
138	Oil and gas field services.	231	52	3,990	20,868	3,654	7,373	18,953	40,599	24,520	59,422	5,697	3,654	37,944
13	East New Mexico.	503	87	6,649	40,006	5,432	10,813	30,706	362,604	173,527	451,681	84,450	(NA)	(NA)
131	Crude petroleum and natural gas..	309	30	2,717	19,022	1,824	3,581	11,635	302,511	97,540	324,620	75,431	(NA)	(NA)
138	Oil and gas field services.....	170	44	3,354	17,079	3,105	6,205	15,719	34,016	19,884	49,153	4,747	(NA)	(NA)
13	West New Mexico.	179	24	2,323	13,935	1,649	3,426	9,650	85,607	99,963	148,149	37,421	(NA)	(NA)
131	Crude petroleum and natural gas..	111	11	1,498	8,881	928	1,884	5,255	73,757	39,673	77,062	36,368	(NA)	(NA)
138	Oil and gas field services.....	61	8	636	3,789	549	1,168	3,234	6,583	4,636	10,269	950	(NA)	(NA)
13	Arizona.....	19	-	43	158	34	64	127	420	1,412	593	1,239	(NA)	(NA)
131	Crude petroleum and natural gas	15	-	15	69	10	14	49	258	1,342	375	1,225	(NA)	(NA)
13	Utah.....	114	19	1,344	8,653	1,031	2,315	6,271	100,106	54,879	125,547	29,438	1,981	73,003
131	Crude petroleum and natural gas	68	8	533	3,959	298	594	2,063	89,295	40,228	101,568	27,955	848	60,521
13	Nevada.....	10	-	29	138	25	56	109	505	891	639	757	(NA)	(NA)
13	Pacific.....	880	153	21,501	165,816	15,485	29,993	111,375	1,063,402	485,383	1,320,446	228,339	23,375	1,051,824
131	Crude petroleum and natural gas..	524	51	13,543	108,941	8,584	16,740	63,430	914,019	288,687	988,943	213,763	16,746	1,945,738
132	Natural gas liquids.....	55	18	1,323	10,337	1,197	2,374	9,171	63,929	156,675	217,710	2,894	1,801	59,553
138	Oil and gas field services.....	301	84	6,635	46,538	5,704	10,879	38,774	85,454	40,021	113,793	11,682	4,828	148,529
13	Washington.....	13	2	143	1,227	78	142	660	(3)	1,734	303	707	129	(D)
131	Crude petroleum and natural gas	8	2	120	1,111	58	99	553	(3)	(D)	(D)	564	108	(NA)
13	Oregon.....	7	-	11	79	5	13	35	(3)	1,185	-	334	24	(NA)
131	Crude petroleum and natural gas	7	-	11	79	5	13	35	(3)	1,185	-	334	-	(NA)

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958—Continued

Ind. code	Industry group and geographic area	1963										1958		
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures	All employees	Value added in mining
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages						
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)						
	Pacific—Continued													
13 131	California.....	830	138	20,581	157,084	14,751	28,537	104,792	1,023,573	442,828	1,271,302	195,099	23,106	1,054,158
	Crude petroleum and natural gas	492	45	13,155	104,600	8,342	16,294	60,848	885,899	(D)	(D)	182,020	16,535	946,540
132	Natural gas liquids.....	55	18	1,323	10,337	1,197	2,374	9,171	63,929	156,675	217,710	2,894	1,801	59,553
138	Oil and gas field services.	283	75	6,103	42,147	5,212	9,869	34,773	73,745	(D)	(D)	10,185	4,770	48,065
13 131	Alaska.....	30	13	766	7,426	651	1,301	5,888	41,404	39,636	48,841	32,199	116	( <sup>3</sup> )
	Crude petroleum and natural gas	17	4	257	3,151	179	334	1,994	29,959	39,636	48,841	30,845	81	(D)
138	Oil and gas field services.	13	9	509	4,275	472	967	3,894	11,445			1,354	35	(D)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Excludes figures for Alaska.<sup>2</sup>Includes figures for separately reported central offices and related facilities in Wisconsin.<sup>3</sup>Not shown since the cost of supplies, purchases for resale, purchased fuels and electric energy, contract work, and purchased machinery installed exceeded the sum of value of shipments and receipts and capital expenditures.

**TABLE 2B. Selected Expenditures and Net Shipments of Primary Products, by Industry Group and Selected Geographic Areas: 1963**

(For explanation of column captions see appendix A)

Ind. code	Industry group and geographic area	Selected expenses (\$1,000)					Capital expenditures (\$1,000)			Net shipments of primary products			
		Total	Supplies, purchases for resale, and purchased fuels and electric energy	Natural gas and natural gas liquids received for processing	Contract and subcontract work	Purchased machinery installed	Total	Development and exploration of mineral property	Plant, other construction, machinery, and equipment <sup>1</sup>	Crude petroleum, field condensate, drips, and natural gas liquids <sup>2</sup>		Natural gas <sup>4</sup>	
										Quantity <sup>3</sup> (1,000 barrels)	Value (\$1,000)	Quantity (million cubic feet)	Value (\$1,000)
13	United States, total.....	6,044,355	1,800,894	1,953,875	1,641,513	648,073	2,551,692	1,342,263	1,209,429	3,101,792	8,512,599	13,840,467	2,168,746
131	Crude petroleum and natural gas.....	3,087,321	1,179,536	-	1,486,535	421,250	2,209,930	1,329,563	880,367	2,688,873	7,671,681	13,780,498	2,160,235
132	Natural gas liquids.....	2,152,588	105,620	1,953,875	54,025	39,068	113,856	-	113,856	398,272	798,852	11,531,012	4,877,679
138	Oil and gas field services.....	804,446	515,738	-	100,953	187,755	227,906	12,700	215,206	14,647	42,066	59,969	8,511
13	Middle Atlantic.....	28,731	11,743	777	11,940	4,271	17,327	8,836	8,491	6,914	29,548	90,751	26,525
131	Crude petroleum and natural gas.....	22,386	7,670	-	11,106	3,610	16,287	8,750	7,537	6,799	29,212	89,364	26,216
13	New York.....	5,118	2,259	-	2,294	565	3,302	1,964	1,338	1,977	7,911	3,437	1,075
131	Crude petroleum and natural gas.....	4,347	1,596	-	2,229	522	3,182	1,964	1,218	1,976	7,906	3,362	1,064
13	Pennsylvania.....	23,613	9,484	777	9,646	3,706	14,025	6,872	7,153	4,937	21,637	87,314	25,450
131	Crude petroleum and natural gas.....	18,039	6,074	-	8,877	3,088	13,105	6,786	6,319	4,823	21,306	86,002	25,152
13	East North Central.....	213,617	55,504	92,637	45,874	19,602	52,334	20,882	31,452	116,844	333,107	70,556	16,685
131	Crude petroleum and natural gas.....	96,560	40,172	-	40,161	16,227	43,687	20,557	23,130	105,861	309,001	69,764	16,523
13	Ohio, total.....	21,546	8,163	-	10,214	3,169	11,621	6,079	5,542	5,958	17,909	33,776	7,806
131	Crude petroleum and natural gas.....	15,941	4,196	-	9,553	2,192	10,427	5,903	4,524	5,751	17,286	33,013	7,648
138	Oil and gas field services.....	5,605	3,967	-	661	977	1,194	176	1,018	207	623	763	158
13	Indiana, total.....	16,523	9,490	-	5,483	1,550	4,275	1,272	3,003	11,912	31,984	141	33
131	Crude petroleum and natural gas.....	14,709	8,109	-	5,339	1,261	3,840	1,271	2,569	11,842	31,776	141	33
138	Oil and gas field services.....	1,814	1,381	-	144	289	435	1	434	70	208	-	-
13	Illinois.....	140,200	51,037	( <sup>5</sup> )	17,601	12,229	23,459	10,317	13,142	81,057	232,872	6,193	868
131	Crude petroleum and natural gas.....	50,702	23,006	-	16,934	10,762	21,148	10,232	10,916	71,814	213,139	6,188	867
13	Michigan.....	35,348	20,118	( <sup>5</sup> )	12,576	2,654	12,979	3,214	9,765	17,917	50,342	30,446	7,978
131	Crude petroleum and natural gas.....	15,208	4,861	-	8,335	2,012	8,272	3,151	5,121	16,454	46,800	30,422	7,975
13	West North Central.....	309,741	83,825	107,717	87,300	30,899	105,938	40,817	65,121	168,030	455,415	765,184	100,218
131	Crude petroleum and natural gas.....	150,722	59,308	-	66,534	24,880	79,596	39,117	40,479	149,613	419,819	761,493	99,779
13	North Dakota.....	28,872	13,451	( <sup>5</sup> )	10,038	5,383	12,486	4,665	7,821	25,129	66,726	31,216	2,653
131	Crude petroleum and natural gas.....	20,301	6,332	-	9,363	4,606	10,502	4,186	6,316	22,559	61,853	31,209	2,652
13	Nebraska.....	21,813	10,669	( <sup>5</sup> )	8,531	2,613	8,760	3,982	4,778	21,276	59,309	7,582	1,299
131	Crude petroleum and natural gas.....	15,089	5,666	-	7,633	1,790	7,258	3,820	3,438	20,009	56,264	7,582	1,299
13	Kansas, total.....	257,159	67,308	99,332	67,752	22,767	83,596	31,371	52,225	121,338	328,720	726,359	96,265
131	Crude petroleum and natural gas.....	113,645	46,691	-	48,574	18,380	60,805	30,312	30,493	106,758	301,042	722,575	95,827
132	Natural gas liquids.....	119,910	4,951	99,332	15,450	177	16,410	-	16,410	13,061	23,494	659,322	495,767
138	Oil and gas field services.....	23,604	15,666	-	3,728	4,210	6,381	1,059	5,322	1,519	4,184	3,784	438
13	South Atlantic, total.....	151,252	18,377	103,470	23,407	5,998	29,955	18,080	11,875	13,389	31,402	186,577	48,202
131	Crude petroleum and natural gas.....	36,550	10,480	-	21,468	4,602	27,138	18,073	9,065	3,708	12,656	183,247	47,369
132	Natural gas liquids.....	107,196	2,647	103,470	882	197	1,090	-	1,090	9,675	18,723	303,751	100,363
138	Oil and gas field services.....	7,506	5,250	-	1,057	1,199	1,727	7	1,720	6	23	3,330	833
13	West Virginia.....	106,404	79,066	( <sup>5</sup> )	21,425	5,913	28,100	17,423	10,677	11,510	26,459	182,979	47,211
131	Crude petroleum and natural gas.....	34,778	9,928	-	20,332	4,518	26,135	17,416	8,719	3,240	11,724	179,649	46,378
13	East South Central, total..	191,163	53,137	62,190	58,861	16,975	59,484	30,323	29,161	93,251	252,321	237,289	45,394
131	Crude petroleum and natural gas.....	95,388	32,327	-	50,940	12,121	51,181	27,771	23,410	85,098	234,349	236,823	45,295
132	Natural gas liquids.....	64,551	2,010	62,190	146	205	795	-	795	5,931	12,285	417,636	461,180
138	Oil and gas field services.....	31,224	18,800	-	7,775	4,649	7,508	2,552	4,956	2,222	5,687	466	99

See footnotes at end of table.



TABLE 2B. Selected Expenditures and Net Shipments of Primary Products, by Industry Group and Selected Geographic Areas: 1963—Continued

Ind. code	Industry group and geographic area	Selected expenses (\$1,000)					Capital expenditures (\$1,000)			Net shipments of primary products			
		Total	Supplies, purchases for resale, and purchased fuels and electric energy	Natural gas and natural gas liquids received for processing	Contract and subcontract work	Purchased machinery installed	Total	Development and exploration of mineral property	Plant, other construction, machinery, and equipment <sup>1</sup>	Crude petroleum, field condensate, drips, and natural gas liquids <sup>2</sup>		Natural gas <sup>4</sup>	
										Quantity <sup>3</sup> (1,000 barrels)	Value (\$1,000)	Quantity (million cubic feet)	Value (\$1,000)
13	East South Central—Con.												
131	Kentucky, total.....	75,068	13,947	43,706	11,161	6,254	16,401	6,744	9,657	23,579	64,147	68,506	14,480
132	Crude petroleum and natural gas.....	24,704	9,171	-	10,699	4,834	14,201	6,615	7,586	18,740	54,056	68,226	14,410
138	Natural gas liquids....	45,062	1,344	43,706	6	6	144	-	144	4,692	9,654	(D)	(D)
138	Oil and gas field services.....	5,302	3,432	-	456	1,414	2,056	129	1,927	147	437	280	70
13	Alabama, total.....	15,369	6,979	-	7,481	909	5,147	3,311	1,836	8,651	22,666	-	-
131	Crude petroleum and natural gas.....	9,291	2,859	-	6,114	318	4,454	3,311	1,143	7,743	20,306	-	-
138	Oil and gas field services.....	6,078	4,120	-	1,367	591	693	-	693	908	2,360	-	-
13	Mississippi, total.....	100,504	32,128	18,484	40,081	9,811	37,912	20,261	17,651	60,987	165,409	168,783	30,914
131	Crude petroleum and natural gas.....	61,203	20,245	-	33,990	6,968	32,512	17,838	14,674	58,581	159,888	168,597	30,885
132	Natural gas liquids....	19,489	666	18,484	140	199	651	-	651	1,239	2,631	(D)	(D)
138	Oil and gas field services.....	19,812	11,217	-	5,951	2,644	4,749	2,423	2,326	1,167	2,890	186	29
13	West South Central, total..	4,099,196	1,271,785	1,287,887	1,080,369	459,155	1,783,959	900,196	883,763	1,977,469	5,564,865	10,771,955	1,601,963
131	Crude petroleum and natural gas.....	2,051,519	796,035	-	979,914	275,570	1,525,659	892,588	633,071	1,674,619	4,955,331	10,725,423	1,595,714
132	Natural gas liquids.....	1,436,416	83,046	1,287,887	31,298	34,185	80,395	-	80,395	294,603	585,018	48,471,102	4,262,624
138	Oil and gas field services.....	611,261	392,704	-	69,157	149,400	177,905	7,608	170,297	8,247	24,516	46,532	6,249
13	Arkansas, total.....	42,452	13,117	13,449	10,706	5,180	13,779	7,511	6,268	22,867	57,961	65,396	13,633
131	Crude petroleum and natural gas.....	22,869	9,191	-	10,359	3,319	12,375	7,503	4,872	20,597	53,804	64,858	13,620
132	Natural gas liquids....	14,483	965	13,449	11	58	118	-	118	2,217	4,015	(D)	(D)
138	Oil and gas field services.....	5,100	2,961	-	336	1,803	1,286	8	1,278	53	142	538	13
13	Louisiana, total.....	1,488,270	445,628	456,017	417,737	168,888	730,253	417,686	312,567	555,764	1,666,268	3,695,437	692,131
131	Crude petroleum and natural gas.....	758,866	291,699	-	375,419	91,748	629,123	415,509	213,614	501,969	1,542,217	3,686,848	690,724
132	Natural gas liquids.....	496,919	24,658	456,017	11,416	4,828	15,048	-	15,048	52,264	119,548	42,618,195	4,495,781
138	Oil and gas field services.....	232,485	129,271	-	30,902	72,312	86,082	2,177	83,905	1,531	4,503	8,589	1,407
13	North Louisiana, total.	185,395	31,998	95,710	42,199	15,488	56,196	31,207	24,989	66,735	190,752	482,502	72,302
131	Crude petroleum and natural gas.....	69,010	19,856	-	38,908	10,246	49,217	30,974	18,243	52,718	154,408	480,766	72,051
132	Natural gas liquids..	98,902	1,771	95,710	308	1,113	1,644	-	1,644	13,094	33,572	4,667,643	482,264
138	Oil and gas field services.....	17,483	10,371	-	2,983	4,129	5,335	233	5,102	923	2,772	1,736	251
13	South Louisiana, total.	1,302,875	413,630	360,307	375,538	153,400	674,057	386,479	287,578	489,029	1,475,516	3,212,935	619,829
131	Crude petroleum and natural gas.....	689,856	271,843	-	336,511	81,502	579,906	384,535	195,371	449,251	1,387,809	3,206,082	618,673
132	Natural gas liquids..	398,017	22,887	360,307	11,108	3,715	13,404	-	13,404	39,170	85,976	42,150,552	4,413,517
138	Oil and gas field services.....	215,002	118,900	-	27,919	68,183	80,747	1,944	78,803	608	1,731	6,853	1,156
13	Oklahoma, total.....	426,104	141,082	101,747	127,116	56,159	202,352	98,715	103,637	232,393	620,581	1,118,190	147,248
131	Crude petroleum and natural gas.....	254,198	99,186	-	114,338	40,674	176,026	96,681	79,345	197,737	553,954	1,108,093	146,010
132	Natural gas liquids....	117,453	6,159	101,747	5,937	3,610	10,700	-	10,700	32,592	60,663	(D)	(D)
138	Oil and gas field services.....	54,453	35,737	-	6,841	11,875	15,626	2,034	13,592	2,064	5,964	10,097	1,238
13	Texas, total.....	2,142,370	671,958	716,674	524,810	228,928	837,575	376,284	461,291	1,166,445	3,220,055	5,892,932	748,951
131	Crude petroleum and natural gas.....	1,015,586	395,959	-	479,798	139,829	708,135	372,895	335,240	954,316	2,805,356	5,865,624	745,360
132	Natural gas liquids....	807,561	51,264	716,674	13,934	25,689	54,529	-	54,529	207,530	400,792	4,976,524	4,647,657
138	Oil and gas field services.....	319,223	224,735	-	31,078	63,410	74,911	3,389	71,522	4,599	13,907	27,308	3,591
13	Gulf Coast A, total....	383,174	90,837	175,290	84,977	32,070	115,048	60,021	55,027	176,232	522,028	1,037,335	164,841
131	Crude petroleum and natural gas.....	156,411	59,075	-	76,766	20,570	97,708	58,963	38,745	142,306	439,998	1,027,289	163,375
132	Natural gas liquids..	188,691	9,755	175,290	1,564	2,082	5,888	-	5,888	33,230	79,930	4,104,441	4,143,527
138	Oil and gas field services.....	38,072	22,007	-	6,647	9,418	11,452	1,058	10,394	696	2,100	10,046	1,466

See footnotes at end of table.

TABLE 2B. Selected Expenditures and Net Shipments of Primary Products, by Industry Group and Selected Geographic Areas: 1963—Continued

Ind. code	Industry group and geographic area	Selected expenses (\$1,000)					Capital expenditures (\$1,000)			Net shipments of primary products			
		Total	Supplies, purchases for resale, and purchased fuels and electric energy	Natural gas and natural gas liquids received for processing	Contract and subcontract work	Purchased machinery installed	Total	Development and exploration of mineral property	Plant, other construction, machinery, and equipment <sup>1</sup>	Crude petroleum, field condensate, drips, and natural gas liquids <sup>2</sup>		Natural gas <sup>4</sup>	
										Quantity <sup>3</sup> (1,000 barrels)	Value (\$1,000)	Quantity (million cubic feet)	Value (\$1,000)
13	West South Central—Con.												
131	Gulf Coast B, total....	138,457	31,960	69,037	29,526	7,934	42,761	24,117	18,644	58,819	167,634	759,792	101,668
132	Crude petroleum and natural gas.....	57,498	24,536	-	27,062	5,900	39,178	23,939	15,239	48,126	146,626	753,878	100,851
138	Natural gas liquids..	72,195	2,073	69,037	393	692	1,565	-	1,565	10,495	20,431	438,325	459,821
	Oil and gas field services.....	8,764	5,351	-	2,071	1,342	2,018	178	1,840	198	577	5,914	817
13	South Texas, total....	276,347	62,341	135,117	59,873	19,016	99,424	45,625	53,799	107,733	295,357	1,049,338	134,347
131	Crude petroleum and natural gas.....	105,488	39,625	-	55,168	10,695	87,920	45,526	42,394	74,109	225,537	1,044,920	133,816
132	Natural gas liquids..	149,379	9,003	135,117	2,141	3,118	6,297	-	6,297	33,410	69,199	41,018,025	4121,931
138	Oil and gas field services.....	21,480	13,713	-	2,564	5,203	5,207	99	5,108	214	621	4,418	531
13	Southwest Texas, total.	31,278	11,904	5,747	11,160	2,467	13,179	7,321	5,858	20,472	58,043	121,959	16,447
131	Crude petroleum and natural gas.....	19,754	7,862	-	10,361	1,531	11,920	7,320	4,600	19,332	55,405	121,939	16,444
132	Natural gas liquids..	6,341	536	5,747	46	12	95	-	95	1,068	(D)	41,135	46,007
138	Oil and gas field services.....	5,183	3,506	-	753	924	1,164	1	1,163	72	(D)	20	3
13	North Central A, total.	91,581	39,128	8,872	31,292	12,289	51,436	20,211	31,225	68,533	194,401	119,753	15,389
131	Crude petroleum and natural gas.....	70,406	29,935	-	29,774	10,697	47,370	20,011	27,359	62,341	183,314	119,018	15,297
132	Natural gas liquids..	9,945	740	8,872	106	227	826	-	826	5,597	9,389	470,170	49,115
138	Oil and gas field services.....	11,230	8,453	-	1,412	1,365	3,240	200	3,040	595	1,698	735	92
13	North Central B, total.	68,313	20,755	20,606	20,081	6,871	33,201	10,473	22,728	47,235	129,870	85,800	9,424
131	Crude petroleum and natural gas.....	39,514	14,706	-	19,055	5,753	29,486	10,395	19,091	40,689	118,554	85,332	9,367
132	Natural gas liquids..	22,010	923	20,606	135	346	2,248	-	2,248	6,298	10,598	4133,861	417,936
138	Oil and gas field services.....	6,789	5,126	-	891	772	1,467	78	1,389	248	718	468	57
13	East Texas A, total....	62,788	23,298	12,900	17,464	9,126	38,103	10,107	27,996	32,319	91,429	73,955	10,107
131	Crude petroleum and natural gas.....	29,626	10,442	-	15,800	3,384	30,544	9,785	20,759	28,112	81,140	71,531	9,836
132	Natural gas liquids..	18,460	1,647	12,900	739	3,174	4,334	-	4,334	3,510	8,319	4115,805	414,481
138	Oil and gas field services.....	14,702	11,209	-	925	2,568	3,225	322	2,903	697	1,970	2,424	271
13	East Texas B, total....	159,509	38,357	77,840	26,816	16,496	42,678	14,931	27,747	104,654	292,481	581,373	78,538
131	Crude petroleum and natural gas.....	61,058	25,591	-	25,017	10,450	34,372	14,896	19,476	83,399	241,459	581,040	78,495
132	Natural gas liquids..	87,393	5,210	77,840	439	3,904	5,720	-	5,720	21,105	50,570	4379,747	448,101
138	Oil and gas field services.....	11,058	7,556	-	1,360	2,142	2,586	35	2,551	150	452	333	43
13	West Texas A, total....	628,709	276,662	80,324	175,424	96,299	287,624	125,356	162,268	436,649	1,193,198	1,019,356	93,338
131	Crude petroleum and natural gas.....	346,198	135,491	-	159,166	51,541	232,224	124,989	107,235	383,144	1,105,619	1,018,861	93,283
132	Natural gas liquids..	104,338	8,915	80,324	5,720	9,379	16,793	-	16,793	52,542	84,254	4750,876	492,613
138	Oil and gas field services.....	178,173	132,256	-	10,538	35,379	38,607	367	38,240	963	3,325	495	55
13	West Texas B, total....	91,152	27,100	21,318	31,025	11,709	49,150	25,678	23,472	47,166	119,301	152,059	14,889
131	Crude petroleum and natural gas.....	56,069	19,686	-	28,189	8,194	42,807	24,940	17,867	36,144	102,167	151,387	14,836
132	Natural gas liquids..	25,085	1,890	21,318	391	1,486	2,901	-	2,901	10,548	15,741	4124,435	417,529
138	Oil and gas field services.....	9,998	5,524	-	2,445	2,029	3,442	738	2,704	474	1,393	672	53
13	Panhandle, total.....	211,062	49,616	109,623	37,172	14,651	64,971	32,444	32,527	66,633	156,313	892,212	109,963
131	Crude petroleum and natural gas.....	73,564	29,010	-	33,440	11,114	54,606	32,131	22,475	36,614	105,537	890,429	109,760
132	Natural gas liquids..	123,724	10,572	109,623	2,260	1,269	7,862	-	7,862	29,727	49,922	4855,704	4116,596
138	Oil and gas field services.....	13,774	10,034	-	1,472	2,268	2,503	313	2,190	292	854	1,783	203
13	Mountain, total.....	565,272	162,377	150,014	178,106	74,775	274,356	145,892	128,464	379,573	979,949	1,138,687	140,421
131	Crude petroleum and natural gas.....	345,509	117,760	-	167,037	60,712	252,619	145,763	106,856	343,385	915,992	1,134,918	140,001
132	Natural gas liquids..	160,143	6,261	150,014	1,159	2,709	7,288	-	7,288	35,173	61,086	4266,623	4118,663
138	Oil and gas field services.....	59,620	38,356	-	9,910	11,354	14,449	129	14,320	1,015	2,871	3,769	420
13	Montana.....	48,198	16,331	( <sup>5</sup> )	20,889	10,978	26,659	18,823	7,836	29,893	73,155	21,653	1,773
131	Crude petroleum and natural gas.....	39,364	10,532	-	19,224	9,608	24,479	18,820	5,659	29,380	72,005	21,653	1,773

See footnotes at end of table.

TABLE 2B. Selected Expenditures and Net Shipments of Primary Products, by Industry Group and Selected Geographic Areas: 1963—Continued

Ind. code	Industry group and geographic area	Selected expenses (\$1,000)					Capital expenditures (\$1,000)			Net shipments of primary products			
		Total	Supplies, purchases for resale, and purchased fuels and electric energy	Natural gas and natural gas liquids received for processing	Contract and subcontract work	Purchased machinery installed	Total	Development and exploration of mineral property	Plant, other construction, machinery, and equipment <sup>1</sup>	Crude petroleum, field condensate, drips, and natural gas liquids <sup>2</sup>		Natural gas <sup>4</sup>	
										Quantity <sup>3</sup> (1,000 barrels)	Value (\$1,000)	Quantity (million cubic feet)	Value (\$1,000)
13	Mountain—Continued												
131	Wyoming, total.....	135,932	46,884	23,615	43,253	22,180	69,603	38,276	31,327	139,163	347,080	201,735	29,095
132	Crude petroleum and natural gas.....	94,297	33,940	-	41,246	19,111	63,839	38,267	25,572	133,482	334,740	201,735	29,095
138	Natural gas liquids....	25,132	1,198	23,615	167	152	1,601	-	1,601	5,645	-	4141,192	419,981
138	Oil and gas field services.....	16,503	11,746	-	1,840	2,917	4,163	9	4,154	36	12,340	-	-
13	Colorado, total.....	50,470	14,386	11,872	17,011	7,201	24,789	11,191	13,598	41,747	116,133	84,938	10,337
131	Crude petroleum and natural gas.....	32,346	10,821	-	15,710	5,815	22,617	11,190	11,427	37,940	108,387	83,983	10,239
132	Natural gas liquids....	13,141	622	11,872	526	121	706	-	706	3,471	-	473,105	49,964
138	Oil and gas field services.....	4,983	2,943	-	775	1,265	1,466	1	1,465	336	7,746	955	98
13	New Mexico, total.....	273,490	67,201	105,612	75,748	24,929	121,871	61,602	60,269	133,064	351,021	758,698	88,122
131	Crude petroleum and natural gas.....	137,213	46,700	-	71,892	18,621	111,799	61,486	50,313	109,282	311,969	756,165	87,847
132	Natural gas liquids....	111,757	4,191	105,612	430	1,524	4,375	-	4,375	23,225	-	4663,669	482,421
138	Oil and gas field services.....	24,520	16,310	-	3,426	4,784	5,697	116	5,581	557	39,052	2,533	275
13	East New Mexico, total.....	173,527	49,812	51,078	54,687	17,950	84,450	44,002	40,448	114,855	309,950	390,921	41,923
131	Crude petroleum and natural gas.....	97,540	34,034	-	51,078	12,428	75,431	43,889	31,542	97,876	281,944	388,396	41,649
132	Natural gas liquids..	56,103	3,166	51,078	430	1,429	4,272	-	4,272	16,438	26,514	(NA)	(NA)
138	Oil and gas field services.....	19,884	12,612	-	3,179	4,093	4,747	113	4,634	541	1,492	2,525	274
13	West New Mexico, total.....	99,963	17,389	54,534	21,061	6,979	37,421	17,600	19,821	18,209	41,071	367,777	46,199
131	Crude petroleum and natural gas.....	39,673	12,666	-	20,814	6,193	36,368	17,597	18,771	11,406	30,025	367,769	46,198
132	Natural gas liquids..	55,654	1,025	54,534	-	95	103	-	103	6,787	11,000	(NA)	(NA)
138	Oil and gas field services.....	4,636	3,698	-	247	691	950	3	947	16	46	8	1
13	Utah.....	54,879	25,666	(5)	19,847	9,366	29,438	14,239	15,199	35,571	92,322	70,602	10,811
131	Crude petroleum and natural gas.....	40,228	15,142	-	17,622	7,464	27,955	14,239	13,716	33,162	88,653	70,317	10,764
13	Pacific, total.....	485,383	144,146	149,183	155,656	36,398	228,339	177,237	51,102	346,322	865,992	579,468	189,338
131	Crude petroleum and natural gas.....	288,687	115,784	-	149,375	23,528	213,763	176,944	36,819	319,790	795,321	579,466	189,338
132	Natural gas liquids....	156,675	5,319	149,183	1,077	1,096	2,894	-	2,894	26,308	70,118	4464,087	4145,835
138	Oil and gas field services.....	40,021	23,043	-	5,204	11,774	11,682	293	11,389	224	553	2	-
13	California, total.....	442,828	135,068	149,183	123,948	34,629	195,099	147,729	47,370	(D)	(D)	(D)	(D)
131	Crude petroleum and natural gas.....	(D)	(D)	-	118,289	22,810	182,020	147,566	34,454	(D)	(D)	(D)	(D)
132	Natural gas liquids....	156,675	5,319	149,183	1,077	1,096	2,894	-	2,894	26,308	70,118	4464,087	4145,835
138	Oil and gas field services.....	(D)	(D)	-	4,582	10,723	10,185	163	10,022	-	-	(D)	-
13	Alaska, total.....	39,636	8,282	-	29,695	1,659	32,199	28,506	3,693	(D)	(D)	(D)	(D)
131	Crude petroleum and natural gas.....	(D)	(D)	-	29,081	708	30,845	28,504	2,341	(D)	(D)	(D)	(D)
138	Oil and gas field services.....	(D)	(D)	-	614	951	1,354	2	1,352	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Represents expenditures during the year for both new and used plant and equipment.<sup>2</sup>For natural gas liquids, represents gross shipments less natural gas liquids received for further processing.<sup>3</sup>Includes crude petroleum produced and used at the same establishment in lease operations for power, heat, and other purposes. For all operations in the United States such use in 1963 amounted to 1,592 thousand barrels.<sup>4</sup>For the Natural Gas Liquids Industry, represents residue gas shipped. Such gas is excluded in the totals shown for all Oil and Gas Extraction Industries.<sup>5</sup>The cost of natural gas and natural gas liquids received for processing is included with the cost of supplies, purchases for resale, and purchased fuels and electric energy.

TABLE 3. Detailed Statistics: 1963

Item	13--Oil and gas extraction industries, total	1311--Crude petroleum and natural gas industry			1321--Natural gas liquids industry	138--Oil and gas field services industries			
		Industry, total	Crude petroleum subindustry	Natural gas subindustry		Industry group, total	1381--Drilling oil and gas wells industry	1382--Oil and gas field exploration services industry	1389--Oil and gas field services, n.e.c. industry
Number of operating companies.....	16,339	10,594	9,384	1,628	164	5,915	2,671	359	2,901
Number of establishments, total.....	21,242	14,378	12,326	2,052	652	6,212	2,836	373	3,003
With 0-19 employees.....	18,794	13,424	11,537	1,887	407	4,963	2,090	305	2,568
With 20-99 employees.....	2,112	774	639	135	236	1,102	660	46	396
With 100 employees and over.....	336	180	150	30	9	147	86	22	39
Number of wells producing during December 1963, total.....	580,628	573,456	498,047	75,409	-	7,172	5,925	9	1,238
Oil wells <sup>1</sup> .....	494,995	488,692	473,147	15,545	-	6,303	5,177	8	1,118
Gas wells <sup>2</sup> .....	85,633	84,764	24,900	59,864	-	869	748	1	120
Crude petroleum, field condensate, and drips shipped or used.....1,000 barrels..	2,703,520	2,688,873	2,587,961	100,912	-	14,647	13,452	20	1,175
Natural gas liquids net shipments.....do..	398,272	-	-	-	398,272	-	-	-	-
Natural gas produced.....million cu. ft..	15,956,981	15,896,477	9,391,637	6,504,840	-	60,504	56,543	220	3,741
Natural gas shipped.....do..	13,840,467	13,780,498	7,523,521	6,256,977	<sup>2</sup> 11,531,012	59,969	55,983	86	3,900
Value of shipments and receipts, total..\$1,000..	14,512,459	9,893,763	8,600,086	1,293,677	2,800,802	1,817,894	979,316	119,824	718,754
Residue gas shipped.....do..	1,877,679	-	-	-	1,877,679	-	-	-	-
Natural gas liquids and crude petroleum received for processing.....do..	114,644	-	-	-	114,644	-	-	-	-
Products purchased and resold without further processing.....do..	96,737	15,152	10,367	4,785	-	81,585	4,770	8,120	68,695
Net shipments and receipts, total.....do..	12,423,399	9,878,611	8,589,719	1,288,892	808,479	1,736,309	974,546	111,704	650,059
Crude petroleum, field condensate, and drips.....do..	7,713,747	7,671,681	7,377,201	294,480	-	42,066	37,826	62	4,178
Natural gas liquids.....do..	798,852	-	-	-	798,852	-	-	-	-
Natural gas.....do..	2,168,746	2,160,235	1,170,112	990,123	-	8,511	7,941	11	559
Other products.....do..	4,302	-	-	-	4,302	-	-	-	-
Receipts for services.....do..	1,737,752	46,695	42,406	4,289	5,325	1,685,732	928,779	111,631	445,322
Value added in mining.....do..	11,019,796	9,016,372	7,812,956	1,203,416	762,070	1,241,354	653,337	89,988	498,029
Persons in industry, total.....	289,145	159,088	138,431	20,657	13,940	116,117	56,951	8,886	50,280
Production, development, and exploration workers, average for the year.....	191,976	83,444	71,707	11,737	11,939	96,593	50,333	7,232	39,028
All other employees.....	79,500	61,800	54,135	7,665	1,920	15,780	5,083	1,451	9,246
Proprietors and firm members.....	17,669	13,844	12,589	1,255	81	3,744	1,535	203	2,006
Performing manual labor.....	9,554	6,617	5,812	805	15	2,922	1,119	169	1,634
Man-hours worked by production, development and exploration workers, total.....1,000..	397,348	166,305	142,847	23,458	24,455	206,588	106,266	16,246	84,076
Operating and maintaining wells.....do..	149,373	131,668	114,610	17,058	-	17,705	7,408	9	10,288
Drilling wells and rig building.....do..	107,030	14,881	12,518	2,363	-	92,149	89,628	449	2,072
Exploration work (except drilling).....do..	32,601	14,537	12,140	2,397	-	18,064	1,061	14,946	2,057
Other work.....do..	108,344	5,219	3,579	1,640	24,455	78,670	8,169	842	69,659
Principal expenses designated below, total.....\$1,000..	7,140,993	3,682,502	3,214,972	467,530	2,210,073	1,248,418	676,474	79,326	492,618
Wages of production, development, and exploration workers.....do..	1,093,048	494,910	426,811	68,099	80,745	517,393	281,064	36,915	199,414
Salaries of all other employees.....do..	651,663	521,521	465,821	55,700	15,808	114,334	37,086	10,913	66,335
Supplies, gas purchased for gas lift and repressuring, and purchases for resale.....do..	1,575,624	1,044,877	911,021	133,856	90,453	440,294	232,349	23,036	184,909
Natural gas received for processing.....do..	1,839,231	-	-	-	1,839,231	-	-	-	-
Natural gas liquids and crude petroleum received for processing.....do..	114,644	-	-	-	114,644	-	-	-	-
Fuels purchased.....do..	135,516	56,833	50,760	6,073	7,494	71,189	41,711	3,102	26,376
Electric energy purchased.....do..	89,754	77,826	74,871	2,955	7,673	4,255	2,211	156	1,888
Contract work.....do..	1,641,513	1,486,535	1,285,688	200,847	54,025	100,953	82,053	5,204	13,696
Purchased machinery installed.....do..	648,073	421,250	371,288	49,962	39,068	187,755	115,681	10,064	62,010
Capital expenditures, total.....do..	2,551,692	2,209,930	1,906,498	303,432	113,856	227,906	148,026	11,726	68,154
Development and exploration of mineral property.....do..	1,342,262	1,329,563	1,148,649	180,914	-	12,699	12,351	-	348
New structures, additions to fixed plant, and other construction.....do..	328,037	235,420	191,469	43,951	70,788	21,829	13,542	826	7,461
New machinery and equipment.....do..	743,441	546,228	472,173	74,055	40,208	157,005	92,633	10,545	53,827
Used plant and equipment.....do..	137,952	98,719	94,207	4,512	2,860	36,373	29,500	355	6,518

See footnotes at end of table.

TABLE 3. Detailed Statistics: 1963—Continued

Item	13—Oil and gas extraction industries, total	1311—Crude petroleum and natural gas industry			1321—Natural gas liquids industry	138—Oil and gas field services industries			
		Industry, total	Crude petroleum subindustry	Natural gas subindustry		Industry group, total	1381—Drilling oil and gas wells industry	1382—Oil and gas field exploration services industry	1389—Oil and gas field services, n.e.c. industry
Energy used <sup>3</sup> .....million kwh equivalent..	329,344	146,168	132,125	14,043	158,705	24,471	18,103	547	5,821
Fuel produced and used for fuel at same establishment:									
Crude petroleum.....1,000 barrels..	563	558	555	3	-	5	5	-	-
Natural gas.....million cu. ft..	830,978	350,417	320,001	30,416	479,747	814	802	-	12
Fuels purchased:									
Distillate fuel oil.....1,000 barrels..	3,719	1,272	1,067	205	6	2,441	2,109	63	269
Residual fuel oil.....do..	1,216	678	660	18	4	534	490	1	43
Gas.....million cu. ft..	133,218	72,724	60,885	11,839	33,002	27,492	25,002	51	2,439
Gasoline.....1,000 gallons..	157,550	60,494	53,309	7,185	1,685	95,371	22,351	8,334	64,686
Other fuels.....\$1,000..	21,645	8,030	7,414	616	334	13,281	11,190	333	1,758
Undistributed.....do..	22,309	7,472	7,251	221	-	14,837	8,127	114	6,596
Electric energy purchased.....million kwh..	6,696	5,631	5,440	191	775	290	144	9	137
Electric energy generated.....do..	2,629	376	358	18	1,767	486	351	(D)	(D)
Electric energy sold.....do..	42	-	-	-	42	-	-	-	-
Wells drilled and completed except those drilled on contract for others:									
Wells drilled, total.....number..	41,843	39,886	35,488	4,398	-	1,957	1,734	27	196
Oil wells <sup>1</sup> .....do..	19,837	19,016	18,376	640	-	821	717	3	101
Gas wells <sup>1</sup> .....do..	4,578	4,388	2,103	2,285	-	190	174	3	13
Dry holes <sup>4</sup> .....do..	14,794	13,902	12,527	1,375	-	892	792	21	79
Service wells <sup>4</sup> .....do..	2,634	2,580	2,482	98	-	54	51	-	3
Footage drilled, total.....1,000 ft..	179,429	171,942	149,278	22,664	-	7,487	6,837	82	568
Oil wells.....do..	80,410	77,741	74,352	3,389	-	2,669	2,420	9	240
Gas wells.....do..	25,240	24,394	13,282	11,112	-	846	799	8	39
Dry holes.....do..	69,004	65,113	57,224	7,889	-	3,891	3,543	65	283
Service wells.....do..	4,775	4,694	4,420	274	-	81	75	-	6
Cost of drilling and equipping wells, total.....\$1,000..	2,094,644	2,046,250	1,745,230	301,020	-	48,394	45,271	280	2,843
Oil wells.....do..	1,045,714	1,024,990	978,250	46,740	-	20,724	19,168	27	1,529
Gas wells.....do..	415,586	407,680	238,315	169,365	-	7,906	7,664	46	196
Dry holes.....do..	598,827	579,524	496,456	83,068	-	19,303	17,989	207	1,107
Service wells.....do..	34,517	34,056	32,209	1,847	-	461	450	-	11
Wells drilled and completed on contract for others:									
Wells drilled, total.....number..	36,162	2,121	1,985	136	-	34,041	33,764	46	231
Oil wells <sup>1</sup> .....do..	18,624	1,165	1,129	36	-	17,459	17,325	25	109
Gas wells <sup>1</sup> .....do..	3,515	161	130	31	-	3,354	3,307	2	45
Dry holes <sup>4</sup> .....do..	12,636	670	604	66	-	11,966	11,903	15	48
Service wells <sup>4</sup> .....do..	1,387	125	122	3	-	1,262	1,229	4	29
Footage drilled, total.....1,000 ft..	160,894	6,730	6,196	534	-	154,164	153,315	126	723
Oil wells.....do..	81,270	3,652	3,526	126	-	77,618	77,401	39	178
Gas wells.....do..	17,237	524	403	121	-	16,713	16,322	8	383
Dry holes.....do..	60,371	2,348	2,064	284	-	58,023	57,841	73	109
Service wells.....do..	2,016	206	203	3	-	1,810	1,751	6	53
Costs borne by drilling contractors in drilling and equipping wells, total.....\$1,000..	672,098	23,595	21,169	2,426	-	648,503	644,390	1,239	2,874
Oil wells.....do..	340,350	14,036	13,266	770	-	326,314	325,789	130	395
Gas wells.....do..	81,239	2,403	1,529	874	-	78,836	76,720	130	1,986
Dry holes.....do..	243,753	6,606	5,833	773	-	237,147	235,868	961	318
Service wells.....do..	6,756	550	541	9	-	6,206	6,013	18	175
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	28,309	14,235	12,502	1,733	3,887	10,187	5,253	877	4,057
Per production worker.....hp..	147	170	174	148	326	105	104	121	104
Prime movers.....1,000 hp..	25,137	11,385	9,760	1,625	3,689	10,063	5,174	874	4,015
Electric motors driven by purchased energy.....do..	3,172	2,850	2,742	108	198	124	79	3	42
Horsepower rating of electric motors driven by energy generated at the same establishment.....do..	630	142	125	17	231	257	220	31	6

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>For wells that produced both oil and gas, respondents were requested to classify the wells according to the more valuable total product; classifying "distillate" wells as oil wells if the value of all liquids produced was greater than the value of all gas produced, but otherwise classifying them as gas wells.<sup>2</sup>Represents residue gas. For shipments, the quantity figure has not been added into the total for Major Group 13—Oil and Gas Extraction, since it duplicates production in other industries of this group.<sup>3</sup>For Oil and Gas Field Services Industries, excludes fuels furnished without charge by oil and gas companies for whom work was performed. Such fuels are included in the figures shown for the Crude Petroleum and Natural Gas and Natural Gas Liquids Industries.<sup>4</sup>Dry holes represent wells drilled and abandoned without commercial production during the year. Service wells include gas-injection, water-injection, and brine-disposal wells.

TABLE 4. Selected Statistics for Establishments Classified by Employment Size, by Geographic Area: 1963

Ind. code	Industry, item, and geographic area	All establishments, total	Establishments with an average of--									
			0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
13	United States:											
	Oil and gas extraction:											
	Establishments.....number..	21,242	14,272	2,529	1,993	1,599	513	243	61	21	9	2
	All employees:											
	Total.....number..	1,271,476	17,849	16,747	27,245	49,472	34,745	36,028	21,316	14,986	23,077	(D)
	Payroll.....\$1,000..	1,744,711	73,701	81,292	138,346	279,707	211,960	241,816	157,174	107,735	177,265	(D)
	Production, development, and exploration workers:											
	Total.....number..	191,976	15,037	13,167	22,399	41,744	28,524	28,393	16,192	10,363	16,157	(D)
	Man-hours.....1,000..	28,207	25,872	45,142	85,275	58,602	60,159	34,067	23,337	23,337	36,687	(D)
	Wages.....\$1,000..	1,093,048	62,344	61,190	109,867	225,225	165,627	174,550	111,846	64,682	117,717	(D)
	Value added in mining...\$1,000..	11,019,796	981,780	560,154	769,119	1,665,328	1,316,104	1,750,284	1,628,970	1,146,631	1,201,426	(D)
	Value of shipments and receipts.....do..	14,512,459	1,325,714	740,658	1,244,470	2,838,830	1,832,209	2,121,148	1,790,004	1,255,117	1,364,309	(D)
	Capital expenditures.....do..	2,551,692	357,599	128,264	147,564	306,730	299,836	352,868	329,437	300,900	328,494	(D)
131	Crude petroleum and natural gas:											
	Establishments.....number..	14,378	11,188	1,418	818	570	204	120	41	13	6	-
	All employees:											
	Total.....number..	1,145,244	12,419	9,255	10,912	17,450	14,053	18,167	14,663	9,367	9,985	-
	Payroll.....\$1,000..	1,016,431	47,640	46,671	57,996	107,934	98,107	130,828	111,878	69,240	79,373	-
	Production, development, and exploration workers:											
	Total.....number..	83,444	9,874	6,752	8,105	13,178	9,985	12,513	10,409	5,805	6,823	-
	Man-hours.....1,000..	166,305	18,006	13,135	16,045	27,091	20,312	25,316	20,991	11,925	13,484	-
	Wages.....\$1,000..	494,910	37,644	31,566	39,844	75,071	64,542	81,691	73,979	39,399	51,174	-
	Value added in mining...\$1,000..	9,016,372	884,709	434,032	517,328	1,072,675	977,602	1,498,036	1,526,669	1,078,343	1,026,978	-
	Value of shipments and receipts.....do..	9,893,763	1,111,624	489,234	584,146	1,144,314	1,061,504	1,635,350	1,646,213	1,151,911	1,069,467	-
	Capital expenditures.....do..	2,209,930	316,087	92,764	113,860	251,870	237,699	315,276	308,491	273,305	300,578	-
132	Natural gas liquids:											
	Establishments.....number..	652	117	115	175	192	44	9	-	-	-	-
	All employees:											
	Total.....number..	113,859	273	778	2,462	5,769	2,750	1,378	-	-	-	-
	Payroll.....\$1,000..	196,553	1,785	5,397	16,984	39,830	18,994	9,880	-	-	-	-
	Production and related workers:											
	Total.....number..	11,939	256	713	2,251	5,078	2,474	1,167	-	-	-	-
	Man-hours.....1,000..	24,455	494	1,488	4,615	10,417	5,047	2,394	-	-	-	-
	Wages.....\$1,000..	80,745	1,701	4,865	15,364	34,222	16,664	7,929	-	-	-	-
	Value added in mining...\$1,000..	762,070	23,781	60,793	120,681	334,908	151,914	69,993	-	-	-	-
	Value of shipments and receipts.....do..	2,800,802	112,080	165,436	485,932	1,336,504	498,230	202,620	-	-	-	-
	Capital expenditures.....do..	113,856	27,058	25,343	16,461	18,838	20,151	6,005	-	-	-	-
138	Oil and gas field services:											
	Establishments.....number..	6,212	2,967	996	1,000	837	265	114	20	8	3	2
	All employees:											
	Total.....number..	112,373	5,157	6,714	13,871	26,253	17,942	16,483	6,653	5,619	13,092	(D)
	Payroll.....\$1,000..	1631,727	24,276	29,224	63,366	131,943	94,859	101,108	45,296	38,495	97,892	(D)
	Production, development, and exploration workers:											
	Total.....number..	96,593	4,907	5,702	12,043	23,488	16,065	14,713	5,783	4,558	9,334	(D)
	Man-hours.....1,000..	206,588	9,707	11,249	24,482	47,767	33,243	32,449	13,076	11,412	23,203	(D)
	Wages.....\$1,000..	517,393	22,999	24,759	54,659	115,932	84,421	84,930	37,867	25,283	66,543	(D)
	Value added in mining...\$1,000..	1,241,354	73,290	65,329	131,110	257,745	186,588	182,255	102,301	68,288	174,448	(D)
	Value of shipments and receipts.....do..	1,817,894	102,010	85,988	174,392	358,012	272,475	283,178	143,791	103,206	294,842	(D)
	Capital expenditures.....do..	227,906	14,454	10,157	17,243	36,022	41,986	31,587	20,946	27,595	27,916	(D)

See footnotes at end of table.

TABLE 4. Selected Statistics for Establishments Classified by Employment Size, by Geographic Area: 1963—Continued

Ind. code	Industry, item, and geographic area	All establishments total	Establishments with an average of—									
			0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
	Establishments by division and state: (Number)											
	Middle Atlantic, total.....	931	773	90	29	25	8	4	1	1	-	-
	New York.....	190	160	21	3	3	2	1	-	-	-	-
	Pennsylvania.....	741	613	69	26	22	6	3	1	1	-	-
	East North Central, total.....	2,236	1,690	249	172	100	18	3	4	-	-	-
	Ohio.....	655	538	65	29	18	5	-	-	-	-	-
	Indiana.....	353	277	41	23	10	2	-	-	-	-	-
	Illinois.....	937	673	99	95	56	9	2	3	-	-	-
	Michigan.....	291	202	44	25	16	2	1	1	-	-	-
	West North Central, total.....	1,876	1,280	200	223	134	24	13	2	-	-	-
	Missouri.....	22	19	1	1	1	-	-	-	-	-	-
	North Dakota.....	96	66	5	11	10	2	2	-	-	-	-
	South Dakota.....	13	12	1	-	-	-	-	-	-	-	-
	Nebraska.....	179	122	23	23	9	2	-	-	-	-	-
	Kansas.....	1,566	1,061	170	188	114	20	11	2	-	-	-
	South Atlantic, total.....	1,081	903	79	60	25	9	3	2	-	-	-
	Maryland.....	5	4	-	1	-	-	-	-	-	-	-
	Virginia.....	7	-	-	-	-	-	-	-	-	-	-
	West Virginia.....	1,055	883	77	57	24	9	3	2	-	-	-
	Florida.....	13	8	2	2	1	-	-	-	-	-	-
	East South Central, total.....	1,051	755	129	69	62	22	12	1	1	-	-
	Kentucky.....	689	534	70	47	27	8	2	-	1	-	-
	Tennessee.....	19	17	1	1	-	-	-	-	-	-	-
	Alabama.....	41	27	10	1	1	1	1	-	-	-	-
	Mississippi.....	302	177	48	20	34	13	9	1	-	-	-
	West South Central, total.....	11,360	7,160	1,475	1,159	1,006	338	158	40	15	7	2
	Arkansas.....	285	183	38	34	20	9	1	-	-	-	-
	Louisiana.....	1,352	720	163	151	182	71	43	10	7	4	1
	Oklahoma.....	2,360	1,508	315	265	190	51	21	9	-	1	-
	Texas.....	7,363	4,749	959	709	614	207	93	21	8	2	1
	Mountain, total.....	1,827	1,192	199	181	161	64	25	4	1	-	-
	Montana.....	235	178	11	17	18	9	2	-	-	-	-
	Idaho.....	2	2	-	-	-	-	-	-	-	-	-
	Wyoming.....	411	251	60	40	38	13	7	2	-	-	-
	Colorado.....	356	242	39	39	26	8	1	1	-	-	-
	New Mexico.....	682	427	74	70	66	30	13	1	1	-	-
	Arizona.....	19	16	2	1	-	-	-	-	-	-	-
	Utah.....	114	70	12	13	13	4	2	-	-	-	-
	Nevada.....	8	6	1	1	-	-	-	-	-	-	-
	Pacific, total.....	880	519	108	100	86	30	25	7	3	2	-
	Washington.....	13	8	3	-	-	2	-	-	-	-	-
	Oregon.....	7	7	-	-	-	-	-	-	-	-	-
	California.....	830	495	102	95	76	27	23	7	3	2	-
	Alaska.....	30	9	3	5	10	1	2	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
<sup>1</sup>Includes figures for separately reported central offices and related facilities which were not distributed by size of establishment.

## CRUDE PETROLEUM AND NATURAL GAS

### INDUSTRY DESCRIPTION

This report shows 1963 Census of Mineral Industries statistics for establishments classified in industry 1311, Crude Petroleum and Natural Gas. This industry represents establishments primarily engaged in operating oil and gas field properties. Such activities include exploration for crude petroleum and natural gas; drilling, completing, and equipping wells; and the operation of separators, emulsion breakers, desilting equipment; and all other activities incident to making oil and gas marketable up to the point of shipment from the producing property. This industry also includes production of oil through the mining and extraction of oil from oil shale and oil sands. Establishments primarily engaged in performing oil field services for operators on a contract, fee, or other basis are classified in Group 138, Oil and Gas Field Services.

Figures are also shown in several tables of this report for the two subindustries, Crude Petroleum and Natural Gas. These subindustries represent establishments primarily engaged in producing oil or developing oil properties or in producing gas or developing gas properties, respectively.

For census purposes, a crude petroleum or natural gas establishment covers all oil and gas field activities of an operating company in an entire State or, for Texas, Louisiana, and New Mexico, all such activities in one district. Separate reports were required for each State or district in which a company operated. The separate reports by districts were obtained for the first time in the 1963 census.

Production of natural gas liquids is classified in industry 1321, Natural Gas Liquids, and the statistics for this industry are shown in report MIC63(1)-13C. Statistics for establishments primarily engaged in performing oil and gas field services for others, classified in Group 138, Oil and Gas Field Services, are shown in report MIC63(1)-13D. Pipe line transportation of petroleum, gasoline, and other petroleum products is classified in Major Group 46, and pipe line transportation of natural gas in industries 4922 and 4923; such activities were not covered in the 1963 censuses. Establishments primarily engaged in petroleum refining and in the production of lubricating oils and greases are classified in Major Group 29, Petroleum Refining and Related Industries, and the information reported for them is included in the Census of Manufactures publications.

Reports were obtained from the operators of oil and gas field properties, whether or not they owned the properties operated, but only one report was required for all oil and gas field properties operated in each State or district. These reports were classified in the Crude Petroleum and Natural Gas Subindustries, primarily on the basis of the product of principal value. In many cases, these reports covered the operation of both oil and gas wells. Moreover, the same well usually produces both oil and gas. Hence, the subindustry statistics provide only a rough indicator of the differences in operating requirements for production of crude petroleum and natural gas. Collection of district reports for 1963, however, permitted somewhat better segregation of the costs for operating oil as against gas fields. For 1963, 42 percent of all gas produced in the Crude Petroleum and Natural Gas Industry was produced in the Natural Gas Subindustry, as compared with only 27 percent for 1958.



## SUMMARY OF FINDINGS

Value of Shipments and Receipts.—The total value of shipments and receipts of the Crude Petroleum and Natural Gas Industry amounted to \$9,894 million. Of this total, the Crude Petroleum Subindustry accounted for \$8,600 million, including \$7,377 million for crude petroleum, field condensate, and drips shipped and \$1,170 million for natural gas shipped. The Natural Gas Subindustry accounted for \$1,294 million, including \$294 million for crude petroleum, field condensate, and drips shipped and \$990 million for natural gas shipped.

Type of Operation.—For many purposes, a more useful classification of reports is by type of operation as shown in tables 2A and 3B and included in certain other tables of this report. This classification segregates reports representing oil wells only, both oil and gas wells, and gas wells only. (In the census, a well was defined as an oil well if oil was the principal product as measured by value, and as a gas well if the value of gas shipped exceeded the value of oil shipped.) Such a classification was also provided in the 1958, 1954, 1939, 1919, and 1909 censuses. For 1963, the value of shipments and receipts of establishments operating oil wells only was \$1,637 million; both oil and gas wells, \$7,962 million; and gas wells only, \$294 million. Since the largest reports usually covered both oil and gas wells, this group accounted for 79 percent of the total crude petroleum, field condensate, and drips produced in the Crude Petroleum and Natural Gas Industry and for about 86 percent of total gas production.

Establishments in the Crude Petroleum and Natural Gas Industry not only operated producing oil and gas wells, but also reported that they drilled for their own account about 39,900 wells during 1963, and that they drilled on contract for others about 2,100 wells. Total receipts for services performed for others by establishments in the Crude Petroleum and Natural Gas Industry were \$47 million. Separate reports for operation of oil and gas field properties were sometimes furnished by contractors who also operated wells. But in most cases consolidated reports were received for establishments primarily performing contract services in a State, but also operating oil and gas field properties. Such reports were classified in the contract services industries. The total value of crude petroleum, field condensate, and drips shipped in 1963 by such industries was \$42 million and the value of natural gas shipped was nearly \$9 million.

Separate type-of-operation statistics are shown in tables 2A and 3B for establishments with and without drilling. For 1963, 56 percent of all producing establishments were engaged only in operating and maintaining wells, having no drilling activities either by their own employees or on contract by others. Such establishments, however, accounted for only 10 percent of the total value of shipments, 18 percent of total persons engaged, 7 percent of total principal expenses, and less than 3 percent of total capital expenditures.

Drilling Costs.—New capital expenditures in the Crude Petroleum and Natural Gas Industry amounted to \$2,111 million. This represented 15 percent of the total new capital expenditures for all manufacturing and mineral industries combined, as compared with value added in mining by these industries which amounted to 4 percent of the total value added in manufacturing and mining. Expenditures for drilling wells was about the same as this figure, amounting to \$2,099 million, of which \$2,051 million was by establishments classified in the Crude Petroleum and Natural Gas Industry. However, operators customarily do not capitalize the cost of drilling dry holes, for which the expenditures were \$600 million. Because of the magnitude of these drilling expenditures, and their continuing necessity to maintain a domestic oil and gas production industry, detailed data on them were obtained in the 1963 census, as they were for 1958, 1954, and 1939. Figures for the number, footage, and costs for drilling and equipping oil, gas, dry, and service wells were obtained separately by type of well.

Operators reporting in the census drilled and completed 41,843 wells, including 19,837 oil wells, 4,578 gas wells, 14,794 dry holes, and 2,634 service wells in the United States during the year. The detailed statistics for footage and costs for drilling and completing these wells are shown in table 6E of this report. Table 6F shows separately data for offshore wells drilled, as well as production and employment at offshore operations. The report MIC63(1)-13D, Oil and Gas Field Services, shows that contractors reported 36,162 wells drilled on contract or about 87 percent of all wells drilled in 1963. About 80 percent of all wells were drilled by contractors in 1958. Because such a high percentage of wells are now drilled by contractors, no separate figures were requested from the operators of oil and gas field properties for wells drilled by own company in 1963.

Size of Establishment.—Table 4 shows general statistics for establishments classified by size, as measured by number of employees. This is the sum of statistics for individual States or districts and represents approximately the size of oil and gas field operations of each company in that State or district, since, in general, each establishment report represents all operations of a company in the State or district. However, separate reports were usually furnished by parent and subsidiary companies. If both operated in the same State or district, they would be included separately in this tabulation.

At the request of other government agencies and business groups, certain tabulations have been made for this industry for 1963 and earlier years which classify operating companies in terms of size as measured by value of shipments. These statistics are shown in table 12B. For this table, all reports for a parent company and its subsidiaries have been combined.

In both of these tables, it must be emphasized that the measures are of size of company as an operator of oil and gas field properties, including properties operated by the company for the account of others. No information is available from the 1963 census to measure size of company as an owner of oil and gas properties.

County Statistics.—Each State report contained an inquiry requesting, by county, the quantity of crude petroleum and natural gas shipped, receipts for services performed for others, employment on March 15, and capital expenditures. The figures for capital expenditures by county were obtained for the first time for 1963. The county distribution was not completely reported. However, the distributed figures accounted for nearly 99 percent of the total shipments reported. The county statistics for crude petroleum and natural gas shipped are shown in table 6C of this report.

General statistics by county were completed for each establishment by allocating the reported totals on the basis of the reported county figures. All employment, payroll, and man-hour figures were allocated on the basis of the reported March 15 employment. Other allocated figures were based on "Value of shipments and receipts" by county and on capital expenditures. "Value of shipments and receipts" was estimated by county by multiplying the average unit values of crude petroleum and natural gas indicated by reported figures for each establishment by the reported county quantity figures and adding these estimated total values of oil and gas for each county to the reported receipts for services. These county figures together with counts of "county establishments" are shown in table 2B.

Indexes of Production and Unit Value.—For the Crude Petroleum and Natural Gas Industry, the production index for primary products of the industry and wells drilled increased to 118 in 1963 from the 1958 level of 105. The unit value index for 1963 was 107 compared to 109 for 1958. Both indexes were computed on a basis of 1954 = 100. For crude petroleum, the 1963 production index was 121 compared with 107 for 1958; and the corresponding unit value indexes were 103 and 108, respectively. For

natural gas, the production index was 170 for 1963 and 127 for 1958; and the unit value indexes were 133 and 108. For wells drilled, the quantity index, based on footage drilled, was 91 for 1963 and 94 for 1958 and the unit cost (or value) indexes were 99 for 1963 and 112 for 1958.

Secondary Production.—The general statistics (employment, payroll, value of shipments, cost of supplies, etc.) are reported for each establishments as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the production of secondary products and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7 to 12) with product, drilling, and number of wells statistics (tables 6A to 6F) showing shipments and related statistics for all industries of the primary products and related activities of the specified industry. The extent of the "product mix" is indicated in table 5A which shows the value of primary and secondary products shipped by establishments classified in the specified industry or subindustry and also the value of primary products of the industry produced as secondary products by establishments classified in other industries. Drilling statistics and number of producing wells for all industries as shown in tables 6E and 6G may be compared with such statistics for the Crude Petroleum and Natural Gas Industry only as shown in tables 3A and 3B.

Comparability With Bureau of Mines Statistics.—The Bureau of the Census attempts to cover all establishments with value of shipments or reported costs of \$500 or more. Establishments with no employees amounted to 30 percent of all establishments covered in the Crude Petroleum and Natural Gas Industry in the 1963 census, and establishments with less than 5 employees accounted for 78 percent of all establishments, the latter establishments representing 11 percent of the total value of shipments and receipts for the industry, 14 percent of all capital expenditures, and probably a higher percentage of total contract expenditures since many such establishments drilled dry holes for which the costs would not be capitalized. The large number of small operations and the prevalence of operation of properties or drilling for oil and gas under short-term agreements and joint ventures in widely scattered areas make coverage of this industry by the usual census techniques particularly difficult.

For the above reasons, a supplemental survey was designed to improve coverage. The mailing list for this survey was obtained by asking all drilling contractors with quarterly payroll of \$4,000 or more to provide the names and addresses of companies for whom they performed services. After eliminating, insofar as possible, the names of previously surveyed operators, an abbreviated reporting form was sent to these additional names. About 4,000 such forms were mailed. It was found that a considerable number of the reports received in this survey were duplicates of reports already submitted under a slightly different name. Such reports were rejected from the tabulations. An exact measure of the contribution of this survey is not available at this time. However, this supplemental survey appears to have added 2 to 3 percent to coverage of shipments of oil and gas, probably a higher percentage to coverage of drilling activities and capital expenditures, and well over 10 percent to establishment coverage.

Even with this supplemental survey, the coverage of production, shipments, and operating costs for the Crude Petroleum and Natural Gas Industry in the 1963 census is probably slightly lower than in most other areas of the economic censuses. However, the census is the only attempt by any federal or private organization to obtain complete coverage statistics directly from oil and gas field operators. All totals from other sources for such activities represent figures developed from a relatively small sample of reports, primarily from large companies, or from secondary source reports, such as for pipe line runs and productive wells connected to pipe lines.

Census figures have been compared with totals from various sources. Table A shows a comparison of census figures for number of wells, crude petroleum produced, and natural gas shipped or used, except for repressuring, with corresponding totals published by the Bureau of Mines, showing the figures by regions and selected States. The coverage in the 1963 census was slightly higher than for 1958. At the U.S. level, the coverage percentages were identical for 1963 and 1958 for oil and gas wells drilled but were 1 percent higher than in 1958 for productive wells; dry holes and service wells drilled; crude petroleum produced; and natural gas shipped or used, except for repressuring. The indicated lowest coverage is in productive wells and appears to be accounted for almost entirely by stripper wells in oil fields. Figures for oil and gas wells have been combined in this table since the distinction between such wells may have been made somewhat differently in statistics from other sources. For similar reasons, the figures for dry holes and service wells have been combined. The indicated lower coverage in this area is probably partly due to the inclusion as service wells by other sources of wells drilled for storage purposes; such wells were excluded from Census Bureau reports.

Table B shows a comparison of quantity and value figures for petroleum and natural gas as published by the Bureau of the Census and the Bureau of Mines. As indicated in the footnotes to this table, the differences between the two sets of figures are only partly due to coverage and partly to some differences in level of collection of the products data.

Table A. 1963 BUREAU OF THE CENSUS FIGURES FOR WELLS AND QUANTITY OF PRODUCTS AS PERCENTS OF BUREAU OF MINES FIGURES

Geographic division and State	Number of wells			Crude petroleum produced <sup>3</sup>	Natural gas shipped or used, except for repressuring <sup>4</sup>
	Productive at end of 1963 <sup>1</sup>	Drilled and completed during 1963 <sup>2</sup>			
		Oil and gas wells	Dry holes and service wells		
United States.....	92	98	94	98	98
Middle Atlantic.....	73	77	85	101	99
East North Central.....	80	101	87	98	94
Illinois.....	92	106	92	97	86
West North Central.....	85	94	100	97	99
Kansas.....	84	94	103	99	100
South Atlantic.....	77	87	86	97	89
East South Central.....	100	98	100	101	98
West South Central.....	97	97	96	98	98
Louisiana.....	102	95	94	98	97
Oklahoma.....	88	94	100	99	93
Texas.....	100	99	95	98	99
Mountain.....	100	98	95	96	96
Wyoming.....	114	104	100	92	102
New Mexico.....	92	99	91	100	96
Pacific.....	117	119	86	103	101

<sup>1</sup>Census figures represent wells producing in December plus wells shut in or idle during December.

<sup>2</sup>The totals for oil and gas wells and dry holes represent Oil and Gas Journal figures as reproduced by the Bureau of Mines. Figures for service wells drilled were taken directly from the Oil and Gas Journal.

<sup>3</sup>Census figures represent crude petroleum, field condensate, and drips shipped and crude petroleum produced and used at the same establishment.

<sup>4</sup>Represents natural gas produced less natural gas vented to air, burned in flames, and

Table B. 1963 BUREAU OF THE CENSUS FIGURES FOR QUANTITY AND VALUE OF PRODUCTS COMPARED WITH BUREAU OF MINES FIGURES

Product	Unit of Measure	Bureau of the Census statistics		Bureau of Mines statistics			
		Production (quantity)	Shipments (including interplant transfers)		Production (quantity)	Shipments	
			Quantity	Value (\$1,000)		Quantity	Value (\$1,000)
Crude petroleum, including field condensate and drips.....	1,000 barrels	12,703,520	2,701,978	7,713,747	2,752,723	(NA)	27,965,743
Natural gas.....	Million cu. ft.	15,956,981	13,840,467	2,168,746	16,973,368	314,746,663	32,328,030

(NA) Not available.

<sup>1</sup>Represents crude petroleum shipped plus crude petroleum produced and used at the same establishment in lease operations.

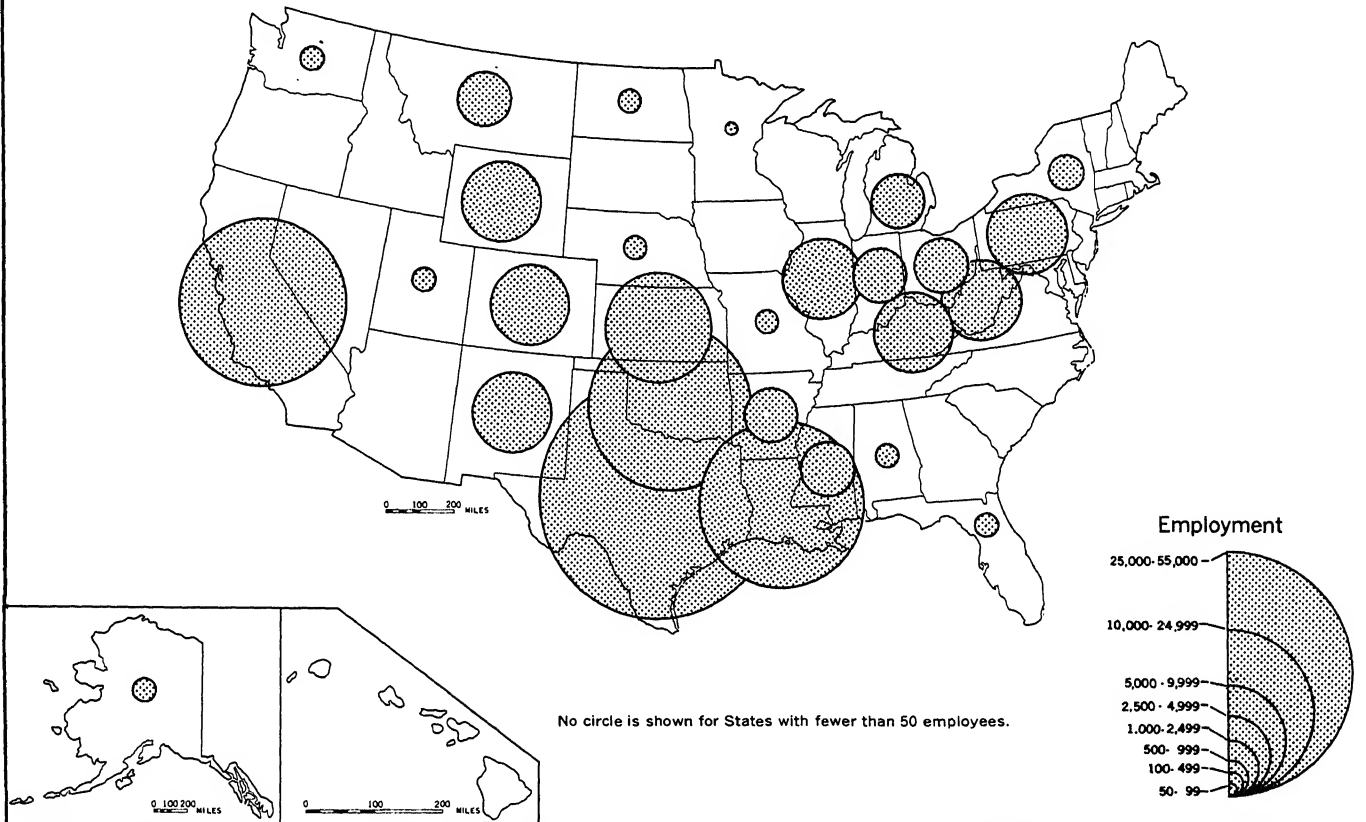
<sup>2</sup>Represents value of production.

<sup>3</sup>Represents marketed production, "comprising gas sold or consumed by producers, including losses in transmission, amounts added to storage, and increases in gas in pipe lines." Census figures show 551,102 million cubic feet of gas produced and used in the same establishment in lease operations and net increase in underground storage of 5,201 million cubic feet; these figures are not included in the Census shipments figures shown.

# Employment: 1840-1963

## CRUDE PETROLEUM AND NATURAL GAS

Distribution of Employment by State: 1963



## Employment and Production: 1840-1963

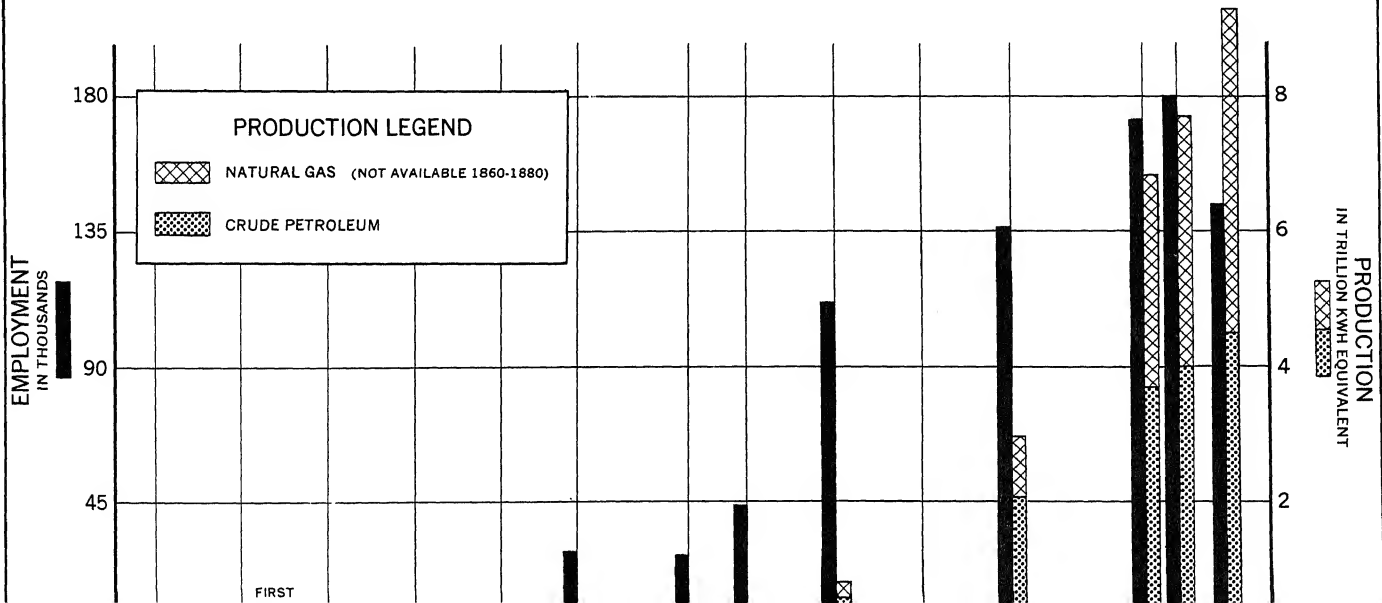


TABLE 1. General Statistics: 1963 and Earlier Years

Industry code, industry, and year	Operating companies	Establishments <sup>1</sup>		All employees		Production, development, and exploration workers			
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages	
									(number)
1311.--CRUDE PETROLEUM AND NATURAL GAS									
1963, total.....	10,594	14,378	954	145,244	1,016,431	83,444	166,305	494,910	
Crude petroleum subindustry.....	9,384	12,326	789	125,842	892,632	71,707	142,847	426,811	
Natural gas subindustry.....	1,628	2,052	165	19,402	123,799	11,737	23,458	68,099	
1958, total.....	9,852	12,010	1,093	180,121	1,043,108	102,485	201,009	497,867	
Crude petroleum subindustry.....	8,781	10,620	975	164,804	966,780	92,398	181,325	453,243	
Natural gas subindustry.....	1,241	1,390	118	15,317	76,328	10,087	19,684	44,624	
1954, total <sup>2</sup> .....	9,720	11,508	1,042	172,506	835,740	109,792	216,581	459,955	
Crude petroleum subindustry <sup>2</sup> .....	8,565	10,101	(NA)	161,282	790,946	101,542	201,086	430,497	
Natural gas subindustry.....	1,290	1,407	(NA)	11,224	44,794	8,250	15,495	29,458	
1939 <sup>2</sup> .....	8,061	8,605	(NA)	136,051	234,899	105,505	190,674	155,700	
1919 <sup>3</sup> .....	(NA)	9,970	(NA)	111,611	169,276	93,659	(NA)	135,397	
1909 <sup>3</sup> .....	8,053	8,202	(NA)	43,990	35,553	37,603	(NA)	28,094	
1902.....	31,736	(NA)	(NA)	27,558	21,319	422,438	(NA)	16,392	
1889.....	(NA)	(NA)	(NA)	29,223	10,283	26,911	(NA)	8,748	
1880.....	(NA)	(NA)	(NA)	11,477	7,179	(NA)	(NA)	(NA)	
1870.....	(NA)	2,314	(NA)	4,488	3,995	(NA)	(NA)	(NA)	
1860 <sup>5</sup> .....	(NA)	64	(NA)	922	339	(NA)	(NA)	(NA)	
	Value added in mining	Selected expenses			Value of shipments and receipts	Production of primary products		Capital expenditures	Horsepower rating of power equipment
		Supplies and purchased fuels and electric energy <sup>6</sup> 7	Contract work	Purchased machinery installed		Crude petroleum, field condensate, and drips <sup>7</sup>	Natural gas		
1311.--CRUDE PETROLEUM AND NATURAL GAS									
1963, total.....	9,016,372	1,179,536	1,486,535	421,250	9,893,763	2,689	15,896	2,209,930	14,235
Crude petroleum subindustry.....	7,812,956	1,036,652	1,285,688	371,288	8,600,086	2,588	9,391	1,906,498	12,502
Natural gas subindustry.....	1,203,416	142,884	200,847	49,962	1,293,677	101	6,505	303,432	1,733
1958, total.....	27,339,922	1,055,041	1,455,267	486,886	28,385,906	22,353	12,085	1,947,634	(NA)
Crude petroleum subindustry.....	26,823,328	931,421	1,326,068	444,031	27,809,898	22,307	8,860	1,711,374	(NA)
Natural gas subindustry.....	516,594	123,620	129,199	42,855	576,008	46	3,225	236,260	(NA)
1954, total <sup>2</sup> .....	6,129,213	759,483	1,458,807	621,048	7,070,097	2,201	10,085	1,898,454	9,123
Crude petroleum subindustry <sup>2</sup> .....	5,741,256	711,173	1,372,495	588,211	6,642,452	2,172	7,386	1,770,683	8,636
Natural gas subindustry.....	387,957	48,310	86,312	32,837	427,645	29	2,699	127,771	487
1939 <sup>2</sup> .....	1,071,989	104,931	199,034	(NA)	1,375,954	1,229	2,929	(NA)	3,397
1919 <sup>3</sup> .....	613,744	247,947	70,102	(NA)	931,793	350	8727	(NA)	1,827
1909 <sup>3</sup> .....	111,858	56,417	17,143	(NA)	185,418	172	8432	(NA)	1,231
1902.....	59,022	24,965	18,278	(NA)	102,265	89	8206	(NA)	1,014
1889.....	15,318	22,690	(NA)	(NA)	38,008	35	8552	(NA)	(NA)
1880.....	17,697	93,714	103,730	(NA)	24,601	26	(NA)	(NA)	(NA)
1870.....	17,902	1,402	(NA)	(NA)	19,304	4	(NA)	(NA)	23
1860 <sup>5</sup> .....	2,088	2,167	(NA)	(NA)	4,255	1	(NA)	(NA)	(NA)

Note: For explanation of column captions see appendix A. For more detailed historical statistics for this industry see table 1 of the corresponding chapter of the 1954 Census of Mineral Industries, Volume I.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Figures for 1963 and earlier years are not entirely comparable. For 1963, companies made separate establishment reports by districts for Louisiana, Texas, and New Mexico, whereas for earlier years each report (establishment) represented all operations in an entire State.

<sup>2</sup>Excludes Alaska: for 1958, figures for 17 establishments; for 1954, figures for 5 establishments; for 1919, figures for 1 establishment.

<sup>3</sup>Includes statistics for the Natural Gas Liquids Industry. The value of natural gas liquids and field condensate and drips produced in 1919 was \$78,761 thousand, and for 1909, \$29 thousand. For 1919, see also footnote 4.

<sup>4</sup>Figures for average employment were reduced to a 300-day basis for establishments which operated for a shorter period.

<sup>5</sup>These figures, except for quantity of crude petroleum, were reported as "oil, coal" and probably include some refining as well as the production of crude petroleum, or may represent primarily the recovery of oil from coal. The figure for quantity of crude petroleum produced is an estimate by the United States Geological Survey. That agency estimated the corresponding value of crude petroleum as \$4,800 thousand.

<sup>6</sup>Includes the cost of gas purchased for gas lift and repressuring and the cost of products purchased for resale.

<sup>7</sup>For 1963, 1958, and 1954, represents shipments of crude petroleum, field condensate, and drips plus crude petroleum produced and used in lease operations for power and heat or other purposes.

<sup>8</sup>For 1919, 1909, and 1889, represents the sum of gas sold and gas used by producers and excludes gas wasted at well locations. For 1902, it is not clear whether the figure represents only gas sold or includes also gas used by producers.

<sup>9</sup>Represents the cost of drive-pipe, casing, tubing, and torpedoes.

<sup>10</sup>Represents "cost of drilling". It was indicated in the 1880 report that drilling was usually done by contractors.

**TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958**

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man- hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
1311.—CRUDE PETROLEUM AND NATURAL GAS														
United States, total.....	14,378 <sup>1</sup>	954	145,244	1,016,431	83,444	166,305	494,910	9,016,372	2,666,071	421,250	9,893,763	2,209,930	180,121	27,339,922
Crude petroleum subindustry.....	12,326	789	125,842	892,632	71,707	142,847	426,811	7,812,956	2,322,340	371,288	8,600,086	1,906,498	164,723	26,823,328
Natural gas subindustry..	2,052	165	19,402	123,799	11,737	23,458	68,099	1,203,416	343,731	49,962	1,293,677	303,432	15,317	216,594
<u>Division, State, and Subindustry</u>														
Middle Atlantic, total.....	746	30	4,702	25,340	2,966	5,871	13,690	50,413	18,776	3,610	56,512	16,287	5,191	45,906
Crude petroleum.....	574	14	2,415	12,872	1,579	3,172	6,440	24,886	8,752	658	30,062	4,234	3,624	27,655
Natural gas.....	172	16	2,287	12,468	1,387	2,699	7,250	25,527	10,024	2,952	26,450	12,053	1,567	18,251
New York.....	160	5	864	5,857	494	999	2,423	7,970	3,825	522	9,135	3,182	987	6,725
Crude petroleum.....	147	4	369	2,338	332	673	1,364	6,830	3,021	209	8,054	2,006	889	5,649
Natural gas.....	13	1	205	1,519	162	326	1,059	1,140	804	313	1,081	1,176	98	1,076
Pennsylvania.....	586	25	3,838	19,483	2,472	4,872	11,267	42,443	14,951	3,088	47,377	13,105	4,204	39,181
Crude petroleum.....	427	10	1,756	8,534	1,247	2,499	5,076	18,056	5,731	449	22,008	2,228	2,735	22,006
Natural gas.....	159	15	2,082	10,949	1,225	2,373	6,191	24,387	9,220	2,639	25,369	10,877	1,469	17,175
East North Central, total....	1,675	78	7,975	42,621	5,993	11,483	28,541	277,357	80,333	16,227	330,230	43,687	11,318	256,394
Crude petroleum.....	1,544	75	7,560	40,616	5,684	10,906	27,049	267,115	74,979	15,567	319,134	38,527	10,685	251,417
Natural gas.....	131	3	415	2,005	309	577	1,492	10,242	5,354	660	11,096	5,160	633	4,977
Ohio.....	499	13	1,573	7,686	1,101	2,117	4,355	20,833	13,749	2,192	26,347	10,427	3,018	17,649
Crude petroleum.....	381	11	1,269	6,410	859	1,674	3,281	15,563	9,614	1,758	19,083	7,852	2,412	13,122
Natural gas.....	118	2	304	1,276	242	443	1,074	5,270	4,135	434	7,264	2,575	606	4,527
Indiana.....	284	7	1,042	5,698	628	1,087	2,406	21,705	13,448	1,261	32,574	3,840	1,179	25,323
Crude petroleum.....	278	7	1,038	5,689	626	1,083	2,403	21,624	13,415	1,175	32,485	3,729	(NA)	(NA)
Illinois.....	683	43	4,268	22,507	3,474	6,643	17,146	186,903	39,940	10,762	216,457	21,148	6,089	195,517
Michigan.....	209	15	1,092	4,730	790	1,636	4,634	47,916	13,196	2,012	54,852	8,272	1,032	17,905
West North Central.....	1,254	94	8,494	47,548	6,277	12,709	32,491	455,917	125,842	24,880	527,043	79,596	10,958	384,190
Crude petroleum.....	1,190	84	7,602	41,961	5,732	11,635	28,881	380,842	114,994	22,772	446,652	71,956	10,430	347,666
Natural gas.....	64	10	892	5,587	545	1,074	3,610	75,075	10,848	2,108	80,391	7,640	528	36,524
North Dakota.....	62	3	428	2,903	281	587	1,815	54,999	15,695	4,606	64,798	10,502	558	22,352
Nebraska.....	121	4	391	2,533	292	593	1,802	50,017	13,299	1,790	57,848	7,258	569	48,869
Kansas.....	1,047	86	7,394	40,191	5,696	11,509	28,830	350,739	95,265	18,380	403,579	60,805	9,370	312,879
Crude petroleum.....	986	76	6,645	35,226	5,154	10,442	25,232	276,349	84,797	16,272	323,284	54,134	(NA)	(NA)
Natural gas.....	61	10	749	4,965	542	1,067	3,598	74,390	10,468	2,108	80,295	6,671	(NA)	(NA)
South Atlantic.....	878	20	3,438	15,150	2,598	5,098	10,354	52,060	31,948	4,602	61,472	27,138	3,975	40,498
Crude petroleum.....	434	6	1,574	6,762	1,142	2,277	4,278	10,207	10,195	1,276	15,704	5,974	1,349	5,996
Natural gas.....	444	14	1,864	8,388	1,456	2,821	6,076	41,853	21,753	3,326	45,768	21,164	2,626	34,502
West Virginia.....	858	20	3,238	13,525	2,564	5,033	10,171	50,212	30,260	4,518	58,855	26,135	3,789	39,382
Crude petroleum.....	422	6	1,387	5,209	1,120	2,235	4,155	9,658	8,949	1,226	14,348	5,485	1,204	6,148
Natural gas.....	436	14	1,851	8,316	1,444	2,798	6,016	40,554	21,311	3,292	44,507	20,650	2,585	33,234
Florida.....	10	-	149	1,099	22	42	123	587	1,207	50	1,356	488	134	( <sup>2</sup> )
East South Central.....	693	42	4,592	26,514	3,133	6,095	15,621	237,310	83,267	12,121	281,517	51,181	5,393	170,708
Crude petroleum.....	625	38	3,711	21,978	2,439	4,837	12,381	218,075	77,827	10,998	261,828	45,072	4,399	146,556
Natural gas.....	68	4	881	4,536	694	1,258	3,240	19,235	5,440	1,123	19,689	6,109	994	24,152
Kentucky.....	455	20	2,566	11,267	2,111	3,930	8,851	58,780	19,870	4,834	69,283	14,201	3,091	51,640
Crude petroleum.....	405	17	1,766	7,310	1,459	2,742	5,887	45,824	16,615	3,884	57,335	8,988	2,200	36,186
Natural gas.....	50	3	800	3,957	652	1,188	2,964	12,956	3,255	950	11,948	5,213	891	15,454
Alabama.....	27	1	132	857	80	205	462	15,567	8,973	318	20,404	4,454	222	11,357
Mississippi.....	198	21	1,886	14,352	939	1,954	6,286	162,838	54,235	6,968	191,529	32,512	2,071	107,714
Crude petroleum.....	183	20	1,806	13,783	897	1,884	6,010	156,519	52,092	6,795	183,788	31,618	1,972	99,041
Natural gas.....	15	1	80	569	42	70	276	6,319	2,143	173	7,741	894	99	8,673
West South Central, total....	7,499	525	91,004	664,351	47,283	95,115	286,077	6,060,004	1,775,949	275,570	6,585,864	1,525,659	112,039	4,654,605
Crude petroleum.....	6,533	436	80,664	591,040	41,754	83,674	250,717	5,150,812 <sup>3</sup>	1,536,826	242,998	5,611,558	1,319,078	105,332	4,344,305
Natural gas.....	966	89	10,340	73,311	5,529	11,441	35,360	909,192	239,123	32,572	974,306	206,581	6,707	310,300
Arkansas.....	212	13	1,207	6,688	891	1,878	4,571	58,488	19,550	3,319	68,982	12,375	1,905	70,497
Crude petroleum.....	201	11	1,032	5,644	766	1,591	3,873	49,302	15,083	2,718	57,769	9,334	1,803	68,115
Natural gas.....	11	2	175	1,044	125	287	698	9,186	4,467	601	11,213	3,041	102	2,382
Louisiana, total.....	743	82	17,061	131,823	10,603	22,207	72,978	2,107,158	667,118	91,748	2,236,901	629,123	20,532	1,181,307
Crude petroleum.....	612	58	14,283	112,175	8,478	17,779	58,447	1,719,301	552,151	74,807	1,822,778	523,481	18,044	1,042,579
Natural gas.....	131	24	2,778	19,648	2,125	4,428	14,531	387,857	114,967	16,941	414,123	105,642	2,488	138,728
North Louisiana.....	451	36	3,089	19,045	2,135	4,441	11,600	208,899	58,764	10,246	228,692	49,217	(NA)	(NA)
Crude petroleum.....	391	25	2,388	14,790	1,623	3,437	8,769	150,101	50,987	8,603	168,261	41,430	(NA)	(NA)
Natural gas.....	60	11	701	4,255	512	1,004	2,831	58,798	7,777	1,643	60,431	7,787	(NA)	(NA)
South Louisiana.....	292	46	13,972	112,778	8,468	17,766	61,378	1,898,259	608,354	81,502	2,008,209	579,906	(NA)	(NA)
Crude petroleum.....	221	33	11,895	97,385	6,855	14,342	49,678	1,569,200	501,164	66,204	1,654,517	482,051	(NA)	(NA)
Natural gas.....	71	13	2,077	15,393	1,613	3,424	11,700	329,059	107,190	15,298	353,692	97,855	(NA)	(NA)

See footnotes at end of table.



**TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Selected expenses			Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man- hours	Wages	Value added in mining	Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
1311.—CRUDE PETROLEUM AND NATURAL GAS—Continued														
Division, State, and Subindustry—Continued														
West South Central—Continued														
Oklahoma.....	1,603	106	18,625	126,772	9,822	18,694	51,580	627,365	213,524	40,674	705,537	176,026	22,933	523,960
Crude petroleum.....	1,459	101	17,924	122,063	9,428	17,846	49,485	561,007	199,155	39,054	631,994	167,222	22,414	507,573
Natural gas.....	144	5	701	4,709	394	848	2,095	66,358	14,369	1,620	73,543	8,804	519	16,387
Texas, total.....	4,941	324	54,111	399,068	25,967	52,336	156,948	3,266,993	875,757	139,829	3,574,444	708,135	66,669	2,878,841
Crude petroleum.....	4,261	266	47,425	351,158	23,082	46,458	138,912	2,821,202	770,437	126,419	3,099,017	619,041	63,071	2,726,038
Natural gas.....	680	58	6,686	47,910	2,885	5,878	18,036	445,791	105,320	13,410	475,427	89,094	3,598	152,803
Texas Gulf Coast A.....	425	57	14,770	128,927	4,238	8,693	29,291	548,556	135,841	20,570	607,259	97,708	(NA)	(NA)
Crude petroleum.....	358	46	13,003	114,164	3,694	7,541	25,109	505,653	126,489	19,193	558,488	92,847	(NA)	(NA)
Natural gas.....	67	11	1,767	14,763	544	1,152	4,182	42,903	9,352	1,377	48,771	4,861	(NA)	(NA)
Texas Gulf Coast B.....	291	19	1,608	10,624	1,191	2,427	7,553	233,156	51,598	5,900	251,476	39,178	(NA)	(NA)
Crude petroleum.....	157	10	936	6,174	702	1,465	4,548	141,071	26,506	3,322	148,511	22,388	(NA)	(NA)
Natural gas.....	134	9	672	4,450	489	962	3,005	92,085	25,092	2,578	102,965	16,790	(NA)	(NA)
South Texas.....	331	32	3,934	29,061	2,256	4,530	14,561	342,667	94,793	10,695	360,235	87,920	(NA)	(NA)
Crude petroleum.....	222	18	2,925	21,798	1,717	3,496	11,186	259,373	72,621	7,683	274,486	65,191	(NA)	(NA)
Natural gas.....	109	14	1,009	7,263	539	1,034	3,375	83,294	22,172	3,012	85,749	22,729	(NA)	(NA)
Southwest Texas.....	277	9	1,270	7,810	777	1,543	4,259	64,189	18,223	1,531	72,023	11,920	(NA)	(NA)
Crude petroleum.....	246	8	1,162	7,212	694	1,378	3,782	43,547	14,449	1,232	51,653	7,575	(NA)	(NA)
Natural gas.....	31	1	108	598	83	165	477	20,642	3,774	299	20,370	4,345	(NA)	(NA)
North Central Texas A....	797	33	3,883	20,571	2,792	5,698	13,282	177,939	59,709	10,697	200,975	47,370	(NA)	(NA)
Crude petroleum.....	764	31	3,708	19,233	2,703	5,517	12,796	161,995	53,834	10,211	184,855	41,185	(NA)	(NA)
Natural gas.....	33	2	175	1,338	89	181	486	15,944	5,875	486	16,120	6,185	(NA)	(NA)
North Central Texas B....	544	29	2,429	13,148	1,874	3,593	9,232	120,297	33,761	5,753	130,325	29,486	(NA)	(NA)
Crude petroleum.....	512	28	2,316	12,661	1,297	3,460	8,888	115,142	32,621	5,591	125,239	28,115	(NA)	(NA)
Natural gas.....	32	1	113	487	77	133	344	5,155	1,140	162	5,086	1,371	(NA)	(NA)
East Texas A.....	246	13	5,520	44,998	836	1,619	4,375	92,005	26,242	3,384	91,087	30,544	(NA)	(NA)
Crude petroleum.....	222	12	5,454	44,574	785	1,500	4,017	86,022	24,681	3,202	84,830	29,075	(NA)	(NA)
Natural gas.....	24	1	66	424	51	119	358	5,983	1,561	182	6,257	1,469	(NA)	(NA)
East Texas B.....	507	33	4,133	25,752	2,905	5,841	16,379	295,173	50,608	10,450	321,859	34,372	(NA)	(NA)
Crude petroleum.....	442	27	3,720	23,261	2,636	5,221	14,907	247,560	44,865	9,516	271,534	30,407	(NA)	(NA)
Natural gas.....	65	6	413	2,491	269	620	1,472	47,613	5,743	934	50,325	3,965	(NA)	(NA)
West Texas A.....	939	65	12,631	92,743	6,623	13,443	42,609	1,088,931	294,657	51,541	1,202,905	232,224	(NA)	(NA)
Crude petroleum.....	892	64	11,369	84,173	6,548	13,301	42,255	1,065,622	291,046	51,168	1,179,777	228,059	(NA)	(NA)
Natural gas.....	47	1	1,262	8,570	75	142	354	23,309	3,611	373	23,128	4,165	(NA)	(NA)
West Texas B.....	269	8	915	5,838	715	1,388	4,281	105,117	47,875	8,194	118,379	42,807	(NA)	(NA)
Crude petroleum.....	250	7	880	5,644	688	1,332	4,130	100,397	45,415	8,092	113,079	40,825	(NA)	(NA)
Natural gas.....	19	1	35	194	27	56	151	4,720	2,460	102	5,300	1,982	(NA)	(NA)
Texas Panhandle.....	315	26	3,018	19,594	1,760	3,561	11,126	198,963	62,450	11,114	217,921	54,606	(NA)	(NA)
Crude petroleum.....	196	15	1,952	12,264	1,118	2,247	7,294	94,820	37,910	7,209	106,565	33,374	(NA)	(NA)
Natural gas.....	119	11	1,066	7,330	642	1,314	3,832	104,143	24,540	3,905	111,356	21,232	(NA)	(NA)
Mountain.....	1,109	114	11,496	85,966	6,610	13,194	44,706	969,292	284,797	60,712	1,062,182	252,619	14,501	841,883
Crude petroleum.....	944	90	9,399	73,077	5,214	10,471	36,507	886,701	246,109	54,272	973,566	213,516	12,718	788,708
Natural gas.....	165	24	2,097	12,889	1,396	2,723	8,199	82,591	38,688	6,440	86,616	39,103	1,783	53,175
Montana.....	158	14	1,110	7,787	667	1,301	4,230	59,045	29,756	9,608	73,930	24,479	1,597	63,121
Crude petroleum.....	149	12	990	7,140	559	1,110	3,639	58,092	29,036	9,527	72,752	23,903	(NA)	(NA)
Natural gas.....	9	2	120	647	108	191	591	953	720	81	1,178	576	(NA)	(NA)
Wyoming.....	205	26	2,918	23,391	1,775	3,591	13,153	334,324	75,186	19,111	364,782	63,839	3,710	272,602
Crude petroleum.....	195	23	2,797	22,515	1,693	3,415	12,550	318,552	69,492	18,577	348,714	57,907	3,584	264,833
Natural gas.....	10	3	121	876	82	176	603	15,772	5,694	534	16,068	5,932	126	7,769
Colorado.....	237	25	2,702	22,831	1,108	2,229	8,319	109,921	26,531	5,815	119,650	22,617	3,665	132,435
Crude petroleum.....	199	16	2,277	19,745	859	1,752	6,619	103,584	23,884	5,346	113,205	19,609	3,470	127,094
Natural gas.....	38	9	425	3,086	249	477	1,700	6,337	2,647	469	6,445	3,008	195	5,341
New Mexico, total.....	420	41	4,215	27,903	2,752	5,465	16,890	376,268	118,592	18,621	401,682	111,799	4,605	314,428
Crude petroleum.....	335	33	2,886	20,268	1,863	3,726	11,988	322,134	93,013	14,462	343,329	86,280	3,367	280,831
Natural gas.....	85	8	1,329	7,635	889	1,739	4,902	54,134	25,579	4,159	58,353	25,519	1,238	33,597
East New Mexico.....	309	30	2,717	19,022	1,824	3,581	11,635	302,511	85,112	12,428	324,620	75,431	(NA)	(NA)
Crude petroleum.....	287	28	2,613	18,426	1,732	3,435	11,125	296,910	83,198	12,409	318,216	74,301	(NA)	(NA)
Natural gas.....	22	2	104	596	92	146	510	5,601	1,914	19	6,404	1,130	(NA)	(NA)
West New Mexico.....	111	11	1,498	8,881	928	1,884	5,255	73,757	33,480	6,193	77,062	36,368	(NA)	(NA)
Crude petroleum.....	48	5	273	1,842	131	291	863	25,224	9,815	2,053	27,113	11,979	(NA)	(NA)
Natural gas.....	63	6	1,225	7,039	797	1,593	4,392	48,533	23,665	4,140	51,949	24,389	(NA)	(NA)
Arizona.....	15	-	15	69	10	14	49	258	1,277	65	375	1,225	(NA)	(NA)
Crude petroleum.....	11	-	11	53	8	10	38	11	1,151	42	73	1,131	(NA)	(NA)
Utah.....	68	8	533	3,959	298	594	2,063	89,295	32,764	7,464	101,568	27,955	848	60,521
Crude petroleum.....	49	6	435	3,330	232	458	1,671	84,147	28,842	6,290	95,298	23,981	(NA)	(NA)
Natural gas.....	19	2	98	629	66	136	392	5,148	3,922	1,174	6,270	3,974	(NA)	(NA)

See footnotes at end of table.

**TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man- hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
1311.—CRUDE PETROLEUM AND NATURAL GAS—Continued														
<u>Division, State, and Subindustry—Continued</u>														
Pacific, total.....	524	51	13,543	108,941	8,584	16,740	63,430	914,019	265,159	23,528	988,943	213,763	16,746	<sup>2</sup> 945,738
Crude petroleum.....	482	46	12,917	104,326	8,163	15,875	60,558	874,318	252,658	22,747	941,582	208,141	<sup>2</sup> 16,186	<sup>2</sup> 911,025
Natural gas.....	42	5	626	4,615	421	865	2,872	39,701	12,501	781	47,361	5,622	<sup>2</sup> 479	<sup>2</sup> 34,713
Washington (crude petroleum).....	8	2	120	1,111	58	99	553	( <sup>5</sup> )	(D)	7	(D)	564	108	(NA)
Oregon (crude petroleum)...	7	-	11	79	5	13	35	( <sup>5</sup> )	1,182	3	-	334	22	(NA)
California.....	492	45	13,155	104,600	8,342	16,294	60,848	885,899	(D)	22,810	(D)	182,020	16,535	946,540
Alaska.....	17	4	257	3,151	179	334	1,994	29,959	(D)	708	(D)	30,845	81	(D)
<u>Division, State, and Type of Operation</u>														
United States, total.....	14,378	954	145,244	1,016,431	83,444	166,305	494,910	9,016,372	2,666,071	421,250	9,893,763	2,209,930	180,121	<sup>2</sup> 7,339,922
Producing operations, total.....	13,082	937	143,183	1,004,056	82,423	164,332	488,633	9,049,771	2,593,633	417,470	9,893,763	2,167,111	178,231	<sup>2</sup> 7,366,804
With drilling.....	5,810	794	119,769	891,144	66,305	134,536	420,789	8,214,735	2,449,780	396,558	8,948,499	2,112,574	157,086	6,803,657
Without drilling.....	7,272	143	23,414	112,912	16,118	29,796	67,844	835,036	143,853	20,912	945,264	54,537	21,129	563,147
Oil well operations only, total.....	8,715	255	32,392	165,363	24,102	45,757	109,914	1,393,083	421,727	71,218	1,637,466	248,562	45,217	<sup>2</sup> 1,296,847
With drilling.....	3,388	181	18,125	102,504	13,795	27,477	70,018	942,499	332,021	62,330	1,112,564	224,286	29,889	893,719
Without drilling.....	5,327	74	14,267	62,859	10,307	18,280	39,896	450,584	89,706	8,888	524,902	24,276	15,312	403,128
Oil and gas well operations, total.....	3,150	634	105,409	810,200	54,875	111,879	361,781	7,374,667	2,099,400	334,861	7,961,912	1,847,016	127,377	5,961,741
With drilling.....	1,937	579	98,664	771,202	50,521	103,147	339,792	7,048,977	2,055,837	325,924	7,604,605	1,826,133	123,225	5,837,226
Without drilling.....	1,213	55	6,745	38,998	4,354	8,732	21,989	325,690	43,563	8,937	357,307	20,883	4,152	124,515
Gas well operations only, total.....	1,217	48	5,382	28,493	3,446	6,696	16,938	282,021	72,506	11,391	294,385	71,533	5,637	108,216
With drilling.....	485	34	2,980	17,356	1,989	3,912	10,979	61,922	8,304	231,330	62,155	3,972	72,712	
Without drilling.....	732	14	2,402	11,137	1,457	2,784	5,959	58,762	10,584	3,087	63,055	9,378	1,665	35,504
Nonproducing operations..	1,296	17	2,061	12,375	1,021	1,973	6,277	( <sup>5</sup> )	72,438	3,780	-	42,819	1,890	( <sup>5</sup> )
Middle Atlantic, total.....	746	30	4,702	25,340	2,966	5,871	13,690	50,413	18,776	3,610	56,512	16,287	5,191	45,906
Producing operations, total.....	684	29	4,581	24,611	2,907	5,751	13,363	52,113	16,999	3,103	56,512	15,703	5,089	46,300
With drilling.....	180	17	2,445	14,877	1,700	3,492	8,626	38,343	12,099	1,426	38,777	13,091	3,122	30,217
Without drilling.....	504	12	2,136	9,734	1,207	2,259	4,737	13,770	4,900	1,677	17,735	2,612	1,967	16,083
Oil wells only.....	451	8	1,389	6,469	1,007	1,972	3,811	15,241	3,786	273	17,864	1,436	2,187	17,414
With drilling.....	113	5	732	4,049	496	1,058	2,134	8,262	2,002	245	9,354	1,155	881	5,616
Without drilling.....	338	3	657	2,420	511	914	1,677	6,979	1,784	28	8,510	281	1,306	11,798
Oil and gas wells.....	115	10	1,286	7,502	775	1,557	3,415	14,024	5,318	598	16,451	3,489	1,693	13,182
With drilling.....	30	4	971	6,202	557	1,113	2,591	9,877	4,628	438	11,787	3,156	1,354	11,388
Without drilling.....	85	6	315	1,300	218	444	824	4,147	690	160	4,664	333	339	1,794
Gas wells only.....	118	11	1,906	10,640	1,125	2,222	6,137	22,848	7,895	2,232	22,197	10,778	1,209	15,704
With drilling.....	37	8	742	4,626	647	1,321	3,901	20,204	5,469	743	17,636	8,780	887	13,213
Without drilling.....	81	3	1,164	6,014	478	901	2,236	2,644	2,426	1,489	4,561	1,998	322	2,491
Nonproducing operations....	62	1	121	729	59	120	327	( <sup>5</sup> )	1,777	507	-	584	102	( <sup>5</sup> )
New York.....	160	5	819	5,536	494	999	2,423	7,970	3,825	522	9,135	3,182	987	6,725
Producing operations, total.....	149	5	797	5,421	476	963	2,314	8,287	3,363	453	9,135	2,968	977	6,761
With drilling.....	52	5	628	4,780	347	733	1,838	5,381	2,767	449	5,782	2,815	457	2,565
Without drilling.....	97	-	169	641	129	230	476	2,906	596	4	3,353	153	520	4,196
Oil wells only.....	128	4	435	2,211	309	627	1,244	7,050	1,379	118	7,763	784	602	4,661
With drilling.....	40	4	286	1,644	197	431	831	4,608	806	116	4,868	662	133	946
Without drilling.....	88	-	149	567	112	196	413	2,442	573	2	2,895	122	469	3,715
Pennsylvania.....	586	25	3,838	19,483	2,472	4,872	11,267	42,443	14,951	3,088	47,377	13,105	4,204	39,181
Producing operations, total.....	535	24	3,739	18,869	2,431	4,788	11,049	43,826	13,636	2,650	47,377	12,735/	4,112	39,539
With drilling.....	128	12	1,772	9,776	1,353	2,759	6,788	32,962	9,332	977	32,995	10,276	2,665	27,652
Without drilling.....	407	12	1,967	9,093	1,078	2,029	4,261	10,864	4,304	1,673	14,382	2,459	1,447	11,887
Oil wells only.....	323	4	920	4,035	698	1,345	2,567	8,191	2,407	155	10,101	652	1,585	12,753
With drilling.....	73	1	412	2,182	299	627	1,303	3,654	1,196	129	4,486	493	748	4,670
Without drilling.....	250	3	508	1,853	399	718	1,264	4,537	1,211	26	5,615	159	837	8,083
Gas wells only.....	110	10	1,674	9,417	971	1,915	5,119	21,777	7,155	1,919	21,235	9,616	(NA)	(NA)
With drilling.....	32	7	523	3,459	505	1,038	2,935	19,559	4,748	432	17,092	7,647	(NA)	(NA)
Without drilling.....	78	3	1,151	5,958	466	877	2,184	2,218	2,407	1,487	4,143	1,969	(NA)	(NA)
Nonproducing operations..	51	1	99	614	41	84	218	( <sup>5</sup> )	1,315	438	-	370	92	( <sup>5</sup> )

See footnotes at end of table.

**TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man- hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)		
1311.—CRUDE PETROLEUM AND NATURAL GAS—Continued														
Division, State, and Type of Operation—Continued														
East North Central, total....	1,675	78	7,975	42,621	5,993	11,483	28,541	277,357	80,333	16,227	330,230	43,687	11,318	256,394
Producing operations, total.....	1,464	77	7,785	41,870	5,898	11,296	28,036	280,658	76,060	15,722	330,230	42,210	11,271	257,484
With drilling.....	706	66	5,842	34,597	4,343	8,593	22,695	237,936	59,512	14,675	272,368	39,755	9,194	223,038
Without drilling.....	758	11	1,943	7,273	1,555	2,703	5,341	42,722	16,548	1,047	57,862	2,455	2,077	34,446
Oil wells only.....	1,124	50	4,744	21,964	3,817	7,121	16,251	155,415	51,255	8,892	192,910	22,652	7,105	171,981
With drilling.....	492	39	3,061	15,444	2,465	4,792	11,484	115,328	36,562	7,929	139,379	20,440	5,405	141,657
Without drilling.....	632	11	1,683	6,520	1,352	2,329	4,767	40,087	14,693	963	53,531	2,212	1,700	30,324
Oil and gas wells.....	254	25	2,800	18,953	1,889	3,839	10,940	121,706	22,411	6,360	132,282	18,195	3,657	81,990
With drilling.....	168	25	2,612	18,367	1,747	3,576	10,562	119,889	20,643	6,276	128,816	17,992	3,350	78,340
Without drilling.....	86	-	188	586	142	263	378	1,817	1,768	84	3,466	203	307	3,650
Gas wells only.....	86	2	241	953	192	336	845	3,537	2,394	470	5,038	1,363	509	3,513
With drilling.....	46	2	169	704	131	225	649	2,719	2,307	470	4,173	1,323	439	3,041
Without drilling.....	40	-	72	249	61	111	196	818	87	-	865	40	70	472
Nonproducing operations....	211	( <sup>1</sup> )	190	751	95	187	505	( <sup>2</sup> )	4,273	505	-	1,477	47	( <sup>3</sup> )
Ohio.....	499	13	1,573	7,686	1,101	2,117	4,355	20,833	13,749	2,192	26,347	10,427	3,018	17,649
Producing operations, total.....	415	13	1,495	7,390	1,062	2,042	4,113	21,451	12,561	2,080	26,347	9,745	3,000	17,872
With drilling.....	172	13	1,129	6,499	746	1,472	3,368	17,972	11,976	1,991	22,460	9,479	2,387	13,628
Without drilling.....	243	-	366	891	316	570	745	3,479	585	89	3,887	266	613	4,244
Oil wells only.....	209	2	443	1,556	391	743	1,278	7,648	3,562	739	9,279	2,670	614	6,226
With drilling.....	70	2	257	1,131	221	439	897	5,730	3,199	706	7,072	2,563	320	4,579
Without drilling.....	139	-	186	425	170	304	381	1,918	363	33	2,207	107	294	1,647
Oil and gas wells.....	127	9	820	4,909	485	975	2,008	10,409	6,640	957	12,195	5,811	1,892	8,157
Gas wells only.....	79	2	232	925	186	324	827	3,394	2,359	384	4,873	1,264	494	3,489
Indiana.....	284	7	1,042	5,698	628	1,087	2,406	21,705	13,448	1,261	32,574	3,840	1,179	25,323
Producing operations, total.....	256	7	1,026	5,663	621	1,075	2,390	22,291	12,852	1,244	32,574	3,813	1,169	25,419
With drilling.....	122	6	678	4,170	372	693	1,579	19,838	5,278	1,061	22,771	3,406	796	18,705
Without drilling.....	134	1	348	1,493	249	382	811	2,453	7,574	183	9,803	407	373	6,714
Oil wells only.....	245	6	812	3,810	582	967	2,172	18,448	12,397	1,092	28,581	3,447	1,135	25,256
With drilling.....	114	5	469	2,329	337	589	1,368	16,168	4,943	911	18,977	3,045	772	18,641
Without drilling.....	131	1	343	1,481	245	378	804	2,280	7,545	181	9,604	402	363	6,615
Illinois.....	683	43	4,268	22,507	3,474	6,643	17,146	186,903	39,940	10,762	216,457	21,148	6,089	195,517
Producing operations, total.....	622	42	4,213	22,285	3,449	6,593	17,042	187,884	38,881	10,483	216,457	20,791	6,073	196,099
With drilling.....	309	35	3,246	18,534	2,656	5,249	14,134	159,764	31,867	9,856	182,157	19,330	5,294	178,552
Without drilling.....	313	7	967	3,751	793	1,344	2,908	28,120	7,014	627	34,300	1,461	779	17,547
Oil wells only.....	537	37	3,099	14,617	2,536	4,764	11,297	113,960	29,870	6,361	135,572	14,619	4,835	131,052
With drilling.....	233	30	2,170	10,975	1,771	3,474	8,457	85,426	24,209	5,737	102,206	13,166	4,066	114,451
Without drilling.....	304	7	929	3,642	765	1,290	2,840	28,534	5,661	624	33,366	1,453	769	16,601
Michigan.....	209	15	1,085	6,648	790	1,636	4,634	47,916	13,196	2,012	54,852	8,272	1,032	17,905
Producing operations, total.....	171	15	1,044	6,450	766	1,586	4,491	49,032	11,766	1,915	54,852	7,861	1,029	18,094
With drilling.....	103	12	789	5,312	569	1,179	3,614	40,362	10,391	1,767	44,980	7,540	717	12,153
Without drilling.....	68	3	255	1,138	197	407	877	8,670	1,375	148	9,872	321	312	5,941
Oil wells only.....	133	5	390	1,981	308	647	1,504	15,359	5,335	700	19,478	1,916	521	9,447
With drilling.....	75	2	165	1,009	136	290	762	8,004	4,211	575	11,124	1,666	247	3,986
Without drilling.....	58	3	225	972	172	357	742	7,355	1,124	125	8,354	250	274	5,461
West North Central, total....	1,254	94	8,494	47,548	6,277	12,709	32,491	455,917	125,842	24,880	527,043	79,596	10,958	384,190
Producing operations, total.....	1,127	92	8,244	46,227	6,149	12,443	31,862	458,293	122,086	24,438	527,043	77,774	10,859	386,544
With drilling.....	580	85	6,958	41,184	5,117	10,542	27,909	407,223	111,310	22,909	469,112	72,330	9,457	344,645
Without drilling.....	547	7	1,286	5,043	1,032	1,901	3,953	51,070	10,776	1,529	57,931	5,444	1,402	41,899
Oil wells only.....	892	28	3,157	14,238	2,668	5,253	11,731	153,173	45,997	8,311	181,811	28,670	4,305	126,826
With drilling.....	416	24	2,163	10,584	1,850	3,777	8,833	118,830	40,516	7,334	140,413	26,267	3,197	101,503
Without drilling.....	476	4	994	3,654	818	1,476	2,898	34,343	8,481	977	41,398	2,403	1,108	25,323
Oil and gas wells.....	202	61	4,850	30,569	3,370	6,946	19,433	283,989	71,406	16,004	325,739	45,660	6,446	244,101
With drilling.....	155	59	4,618	29,450	3,199	6,611	18,567	273,482	69,824	15,498	313,949	44,855	6,194	231,930
Without drilling.....	47	2	232	1,119	171	335	866	10,507	1,582	506	11,790	805	252	12,171
Gas wells only.....	33	3	237	1,420	111	244	698	21,131	1,683	123	19,493	3,444	108	15,617
With drilling.....	9	2	177	1,150	68	154	509	14,911	970	77	14,750	1,208	66	11,212
Without drilling.....	24	1	60	270	43	90	189	6,220	713	46	4,743	2,236	42	4,405

See footnotes at end of table.

**TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man- hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
1311.—CRUDE PETROLEUM AND NATURAL GAS—Continued														
Division, State, and Type of Operation—Continued														
West North Central—Continued														
Nonproducing operations.....	127	2	250	1,321	128	266	629	( <sup>5</sup> )	3,756	442	-	1,822	99	( <sup>5</sup> )
North Dakota.....	62	3	428	2,903	281	587	1,815	54,999	15,695	4,606	64,798	10,502	558	22,352
Producing operations, total.....	52	3	403	2,688	268	555	1,704	55,234	15,320	4,487	64,798	10,243	529	22,941
With drilling.....	33	3	367	2,439	235	478	1,477	53,174	14,179	4,165	61,448	10,070	478	21,249
Without drilling.....	19	-	36	249	33	77	227	2,060	1,141	322	3,350	173	51	1,692
Nebraska.....	121	4	391	2,533	292	593	1,802	50,017	13,299	1,790	57,848	7,258	569	48,869
Producing operations, total.....	97	2	356	2,345	261	531	1,644	51,246	11,647	1,673	57,848	6,718	543	49,776
With drilling.....	58	2	298	2,054	221	466	1,493	46,264	10,847	1,530	53,092	5,549	481	42,077
Without drilling.....	39	-	58	291	40	65	151	4,982	800	143	4,756	1,169	62	7,699
Oil wells only.....	85	2	204	1,340	158	307	1,047	37,063	9,388	1,156	43,047	4,560	321	28,569
Kansas.....	1,047	86	7,394	40,191	5,696	11,509	28,830	350,739	95,265	18,380	403,579	60,805	9,370	312,879
Producing operations only, total.....	969	85	7,311	39,931	5,653	11,434	28,707	351,450	94,078	18,201	403,579	60,150	9,329	313,635
With drilling.....	484	78	6,104	36,440	4,698	9,682	25,141	307,557	85,284	17,153	353,923	56,071	8,068	281,306
Without drilling.....	485	7	1,207	3,491	955	1,752	3,566	43,893	8,794	1,048	49,656	4,079	1,261	32,329
Oil wells only.....	750	24	2,762	11,652	2,366	4,641	9,766	93,047	30,534	4,916	111,626	16,871	3,448	75,241
With drilling.....	333	20	1,860	8,498	1,622	3,308	7,243	65,028	23,674	4,420	78,205	14,917	2,437	54,404
Without drilling.....	417	4	902	3,154	744	1,333	2,523	28,019	6,860	496	33,421	1,954	1,011	20,837
Oil and gas wells (with drilling).....	142	56	4,067	25,792	3,008	6,222	17,389	227,618	60,640	12,656	260,968	39,946	(NA)	(NA)
Gas wells only (with drilling).....	9	2	177	1,150	68	152	509	14,911	970	77	14,750	1,208	(NA)	(NA)
Nonproducing operations...	78	1	83	260	43	75	123	( <sup>5</sup> )	1,187	179	-	655	(NA)	(NA)
Missouri and South Dakota...	23	1	201	1,229	8	20	44	162	1,583	104	818	1,031	461	90
Producing operations.....	10	-	168	891	3	6	19	350	1,107	77	818	716	458	192
With drilling.....	5	-	163	779	-	-	-	99	1,048	61	515	693	430	13
South Atlantic, total.....	878	20	3,438	15,150	2,598	5,098	10,354	52,060	31,948	4,602	61,472	27,138	3,975	40,498
Producing operations, total.	741	20	3,229	14,447	2,501	4,900	10,020	53,293	28,559	4,341	61,472	24,721	3,847	41,803
With drilling.....	156	16	2,512	11,924	1,724	3,417	8,031	40,585	26,356	3,672	47,587	23,026	2,409	32,148
Without drilling.....	585	4	917	2,523	777	1,483	1,989	12,708	2,203	669	13,885	1,695	1,438	9,655
Oil wells only.....	246	1	381	1,342	298	520	745	3,546	2,928	374	5,204	1,644	463	3,049
With drilling.....	23	1	125	731	87	142	273	-11	2,159	312	932	1,528	130	1,752
Without drilling.....	223	-	256	611	211	378	472	3,557	769	62	4,272	116	333	1,297
Oil and gas wells.....	166	11	1,725	8,375	1,398	2,880	6,417	18,354	9,347	1,759	22,798	6,662	1,803	22,584
With drilling.....	55	10	1,459	7,525	1,192	2,463	5,826	15,785	8,859	1,270	19,784	6,130	1,349	18,393
Without drilling.....	111	1	266	850	206	417	591	2,569	488	489	3,014	532	454	4,191
Gas wells only.....	329	8	1,123	4,730	805	1,500	2,858	31,393	16,284	2,208	33,470	16,415	1,581	16,170
With drilling.....	78	5	728	3,668	445	812	1,932	24,811	15,338	2,090	26,871	15,368	930	12,003
Without drilling.....	251	3	395	1,062	360	688	926	6,582	946	118	6,599	1,047	651	4,167
Nonproducing operations.....	137	-	209	703	97	198	334	( <sup>5</sup> )	3,389	261	-	2,417	128	( <sup>5</sup> )
West Virginia.....	858	20	3,238	13,525	2,564	5,033	10,171	50,212	30,260	4,518	58,855	26,135	3,789	39,382
Producing operations.....	726	20	3,061	13,064	2,479	4,856	9,905	51,183	27,385	4,257	58,855	23,970	3,767	39,474
Gas wells only.....	321	8	1,110	4,658	793	1,477	2,798	30,094	15,842	2,174	32,209	15,901	1,540	14,767
With drilling.....	78	5	728	3,668	445	812	1,932	24,811	15,338	2,090	26,871	15,368	903	10,660
Without drilling.....	243	3	382	990	348	665	866	5,283	504	84	5,338	533	637	4,107
Maryland, Virginia, and Florida.....	20	-	200	1,625	34	65	183	1,848	1,688	84	2,617	1,003	<sup>6</sup> 186	<sup>6</sup> 1,116
Producing operations.....	15	-	168	1,383	22	44	115	2,110	1,174	84	2,617	751	<sup>6</sup> 80	<sup>6</sup> 2,329
East South Central.....	693	42	4,592	26,514	3,133	6,095	15,621	237,310	83,267	12,121	281,517	51,181	5,393	170,708
Producing operations, total.	602	42	4,501	26,165	3,092	6,019	15,438	239,785	79,202	12,009	281,517	49,479	5,313	172,028
With drilling.....	312	35	3,645	22,673	2,459	4,816	13,166	200,731	70,963	10,994	235,913	46,775	4,437	140,048
Without drilling.....	290	7	856	3,492	633	1,203	2,272	39,054	8,239	1,015	45,604	2,704	876	31,980
Oil wells only.....	461	20	1,732	7,820	1,355	2,641	5,710	82,289	33,589	5,323	103,453	17,748	2,581	66,528
With drilling.....	228	13	975	4,681	806	1,592	3,708	45,832	27,364	4,548	62,106	15,638	1,825	39,691
Without drilling.....	233	7	757	3,139	549	1,049	2,002	36,457	6,225	775	41,347	2,110	756	26,837

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Industry, geographic area, and type of operation <sup>1</sup>	1963												1958	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man- hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
1311.—CRUDE PETROLEUM AND NATURAL GAS—Continued														
Division, State, and Type of Operation—Continued														
East South Central—Continued														
Producing operations—Con.														
Oil and gas wells.....	100	20	2,595	17,510	1,619	3,161	9,285	150,723	43,160	6,180	169,847	30,216	2,512	95,399
With drilling.....	76	20	2,551	17,276	1,585	3,094	9,124	148,480	42,709	5,958	167,466	29,681	2,467	92,914
Without drilling.....	24	-	44	234	34	67	161	2,243	451	222	2,381	535	45	2,485
Gas wells only.....	41	2	174	835	118	217	443	6,773	2,453	506	8,217	1,515	220	10,101
With drilling.....	8	2	119	716	68	130	334	6,419	890	488	6,341	1,456	145	7,443
Without drilling.....	33	-	55	119	50	87	109	354	1,563	18	1,876	59	75	2,658
Nonproducing operations....	91	-	91	349	41	76	183	( <sup>5</sup> )	4,065	112	-	1,702	80	( <sup>5</sup> )
Kentucky.....	455	20	2,566	11,267	2,111	3,930	8,851	58,780	19,870	4,834	69,283	14,201	3,091	51,640
Producing operations, total.....	396	20	2,518	11,146	2,087	3,893	7,796	59,464	19,109	4,747	69,283	14,037	3,046	51,801
With drilling.....	199	16	1,976	9,468	1,661	3,110	6,604	48,150	16,736	4,407	56,202	13,091	2,519	44,242
Without drilling.....	197	4	542	1,678	426	783	1,192	11,314	2,373	340	13,081	946	527	7,559
Oil wells only.....	301	13	1,178	4,536	985	1,816	3,688	29,608	10,778	2,577	38,182	4,781	1,834	31,303
With drilling.....	142	9	700	2,977	615	1,137	2,596	18,998	8,626	2,445	25,868	4,201	1,384	24,481
Without drilling.....	159	4	478	1,559	370	679	1,092	10,610	2,152	132	12,314	580	450	6,822
Oil and gas wells.....	62	6	1,208	6,100	1,004	1,892	4,784	26,001	7,712	1,774	27,473	8,014	1,047	16,530
Gas wells only.....	33	1	132	510	98	185	324	3,855	619	396	3,628	1,242	165	3,968
Alabama.....	27	1	132	857	80	205	462	15,567	8,973	318	20,404	4,454	222	11,357
Producing operations, total.....	18	1	114	728	68	175	356	16,109	7,206	318	20,404	3,229	214	12,092
With drilling.....	8	-	29	151	17	40	75	1,817	5,005	171	4,432	2,561	153	4,863
Without drilling.....	10	1	85	577	51	135	281	14,292	2,201	147	15,972	668	61	7,229
Mississippi.....	198	21	1,886	14,352	939	1,954	6,286	162,838	54,235	6,968	191,529	32,512	2,071	107,714
Producing operations, total.....	180	21	1,863	14,257	935	1,947	6,267	164,020	52,765	6,943	191,529	32,199	2,046	108,085
With drilling.....	103	19	1,640	13,054	781	1,666	5,487	150,829	49,134	6,415	175,265	31,113	1,765	90,942
Without drilling.....	77	2	223	1,203	154	281	780	13,191	3,631	528	16,264	1,086	281	17,143
Oil wells only.....	135	6	443	2,585	300	646	1,647	36,381	15,483	2,427	44,567	9,724	537	23,124
With drilling.....	76	4	255	1,616	174	415	1,037	25,083	13,645	1,931	31,793	8,866	295	10,346
Without drilling.....	59	2	188	969	126	231	610	11,298	1,838	496	12,774	858	242	12,778
Oil and gas wells.....	37	14	1,378	11,347	615	1,269	4,501	124,721	35,448	4,406	142,373	22,202	1,458	78,869
Gas wells only.....	8	1	42	325	20	32	119	2,918	1,834	110	4,589	273	51	6,092
West South Central, total....	7,499	525	91,004	664,351	47,283	95,115	286,077	6,060,004	1,775,949	275,570	6,585,864	1,525,659	112,039	4,654,605
Producing operations, total.....	7,029	519	90,292	660,185	46,964	94,533	284,145	6,073,431	1,753,706	274,377	6,585,864	1,515,650	111,645	4,664,108
With drilling.....	3,246	439	76,715	591,089	37,783	77,386	243,726	5,490,744	1,666,855	261,034	5,936,909	1,481,724	101,694	4,387,880
Without drilling.....	3,783	80	13,577	69,096	9,181	17,147	40,419	582,687	86,851	13,343	648,955	33,926	9,951	276,228
Oil wells only.....	4,595	100	15,202	72,855	11,087	20,782	46,767	588,454	188,098	30,638	699,628	107,562	19,789	428,543
With drilling.....	1,791	65	7,109	36,283	5,427	10,726	24,584	316,179	139,742	25,466	388,499	92,888	12,342	255,599
Without drilling.....	2,804	35	8,093	36,572	5,660	10,056	22,183	272,275	48,356	5,172	311,129	14,674	7,447	173,144
Oil and gas wells.....	1,942	404	73,789	580,074	35,024	72,048	232,855	5,318,586	1,535,964	239,235	5,709,866	1,383,919	90,227	4,203,539
With drilling.....	1,196	363	68,804	550,193	31,854	65,648	216,367	5,043,687	1,501,262	232,385	5,409,733	1,367,601	88,130	4,119,599
Without drilling.....	746	41	4,985	29,881	3,170	6,400	16,488	274,899	34,702	6,850	300,133	16,318	2,097	83,940
Gas wells only.....	492	15	1,301	7,256	853	1,703	4,523	166,391	29,644	4,504	176,370	24,169	1,629	32,026
With drilling.....	259	11	802	4,613	502	1,012	2,775	130,878	49,827	3,183	138,677	21,235	1,222	12,882
Without drilling.....	233	4	499	2,643	351	691	1,748	35,513	3,793	1,321	37,693	2,934	407	19,144
Nonproducing operations....	470	6	712	4,166	319	582	1,932	( <sup>5</sup> )	22,243	1,193	-	10,009	394	( <sup>5</sup> )
Arkansas.....	212	13	1,207	6,688	891	1,878	4,571	58,488	19,550	3,319	68,982	12,375	1,905	70,497
Producing operations, total.....	178	12	1,152	6,535	851	1,836	4,505	60,460	16,118	3,041	68,982	10,637	1,881	70,845
With drilling.....	58	11	830	5,017	603	1,336	3,435	38,453	13,025	2,737	44,449	9,766	1,499	55,276
Without drilling.....	120	1	322	1,518	248	500	1,070	22,007	3,093	304	24,533	871	382	15,569
Oil and gas wells.....	21	6	424	2,928	279	642	1,839	30,526	8,977	2,037	35,388	6,152	857	40,118
With drilling.....	17	5	396	2,724	266	618	1,762	23,487	8,472	1,930	27,963	5,926	809	38,166
Gas wells only.....	7	2	148	907	104	246	606	7,644	2,072	261	8,027	1,950	102	2,382
Nonproducing operations..	34	1	55	153	40	42	66	( <sup>5</sup> )	3,432	278	-	1,738	24	( <sup>5</sup> )

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man- hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
1311.—CRUDE PETROLEUM AND NATURAL GAS—Continued														
Division, State, and Type of Operation—Continued														
West South Central—Continued														
Louisiana, total.....	743	82	17,061	131,823	10,603	22,207	72,978	2,107,158	667,118	91,748	2,236,901	629,123	20,532	1,181,307
Producing operations, total.....	681	82	16,979	131,222	10,562	22,126	72,634	2,109,297	663,365	91,683	2,236,901	627,444	20,352	1,185,306
With drilling.....	371	75	15,848	125,646	9,689	20,480	68,836	2,052,649	656,228	90,783	2,175,301	624,359	19,225	1,139,534
Without drilling.....	310	7	1,131	5,576	873	1,646	3,798	56,648	7,137	900	61,600	3,085	1,127	45,772
Oil wells only.....	391	7	1,148	5,336	912	1,795	3,716	55,343	23,139	3,077	66,147	15,412	1,119	22,563
With drilling.....	175	4	495	2,606	405	906	1,843	34,964	19,077	2,806	42,844	14,003	519	7,914
Without drilling.....	216	3	653	2,730	507	889	1,873	20,379	4,062	271	23,303	1,409	600	14,649
Oil and gas wells.....	232	72	15,577	124,435	9,469	19,978	67,920	2,038,098	632,862	87,713	2,153,827	604,846	18,976	1,152,810
With drilling.....	169	68	15,149	121,893	9,141	19,297	66,207	2,004,352	630,211	87,189	2,118,217	603,535	18,623	1,127,457
Without drilling.....	63	4	428	2,542	328	681	1,713	33,746	2,651	524	35,610	1,311	353	25,353
Gas wells only.....	58	3	254	1,451	181	353	998	15,856	7,364	893	16,927	7,186	257	9,933
With drilling.....	27	3	204	1,147	143	277	786	13,333	6,940	788	14,240	6,821	83	4,163
Without drilling.....	31	-	50	304	38	76	212	2,523	424	105	2,687	365	174	5,770
Nonproducing operations..	62	-	82	601	41	81	344	( <sup>5</sup> )	3,753	65	-	1,679	180	( <sup>5</sup> )
North Louisiana, total...	451	36	3,089	19,045	2,135	4,441	11,600	208,899	58,764	10,246	228,692	49,217	(NA)	(NA)
Producing operations, total.....	422	36	3,054	18,862	2,117	4,405	11,507	209,594	57,895	10,240	228,692	49,037	(NA)	(NA)
With drilling.....	237	33	2,396	15,746	1,586	3,364	9,136	178,857	54,078	9,688	194,939	47,684	(NA)	(NA)
Without drilling.....	185	3	658	3,116	531	1,041	2,371	30,737	3,817	552	33,753	1,353	(NA)	(NA)
Oil wells only.....	288	4	737	3,298	599	1,193	2,394	42,871	17,353	2,776	50,675	12,325	(NA)	(NA)
With drilling.....	149	3	362	1,812	308	671	1,341	31,994	15,369	2,672	38,140	11,895	(NA)	(NA)
Without drilling....	139	1	375	1,486	291	522	1,053	10,877	1,984	104	12,535	430	(NA)	(NA)
Oil and gas wells....	105	29	2,151	14,774	1,393	2,963	8,517	155,589	38,849	7,249	166,584	35,103	(NA)	(NA)
With drilling.....	73	27	1,887	13,221	1,169	2,477	7,254	136,741	37,128	6,808	146,463	34,214	(NA)	(NA)
Without drilling.....	32	2	264	1,553	224	486	1,263	18,848	1,721	441	20,121	889	(NA)	(NA)
Gas wells only.....	29	3	166	790	125	249	596	11,134	1,693	215	11,433	1,609	(NA)	(NA)
With drilling.....	15	3	147	713	109	216	541	10,122	1,581	208	10,336	1,575	(NA)	(NA)
Without drilling.....	14	-	19	77	16	33	55	1,012	112	7	1,097	34	(NA)	(NA)
Nonproducing operations	29	-	35	183	18	36	93	( <sup>5</sup> )	869	6	-	180	(NA)	(NA)
South Louisiana, total...	292	46	13,972	112,778	8,468	17,766	61,378	1,898,259	608,354	81,502	2,008,209	579,906	(NA)	(NA)
Producing operations, total.....	259	46	13,925	112,360	8,445	17,721	61,127	1,899,703	605,470	81,443	2,008,209	578,407	(NA)	(NA)
With drilling.....	134	42	13,452	109,900	8,103	17,116	59,700	1,873,792	602,150	81,095	1,980,362	576,675	(NA)	(NA)
Without drilling.....	125	4	473	2,460	342	605	1,427	25,911	3,320	348	27,847	1,732	(NA)	(NA)
Oil wells only.....	103	3	411	2,038	313	602	1,322	12,472	5,786	301	15,472	3,087	(NA)	(NA)
With drilling.....	26	1	133	794	97	235	502	2,970	3,708	134	4,704	2,108	(NA)	(NA)
Without drilling....	77	2	278	1,244	216	367	820	9,502	2,078	167	10,768	979	(NA)	(NA)
Oil and gas wells....	127	43	13,426	109,661	8,076	17,015	59,403	1,882,509	594,013	80,464	1,987,243	569,743	(NA)	(NA)
With drilling.....	96	41	13,262	108,672	7,972	16,820	58,953	1,867,611	593,083	80,381	1,971,754	569,321	(NA)	(NA)
Without drilling....	31	2	164	989	104	195	450	14,898	930	83	15,489	422	(NA)	(NA)
Gas wells only.....	29	-	88	661	56	104	402	4,722	5,671	678	5,494	5,577	(NA)	(NA)
With drilling.....	12	-	57	434	34	61	245	3,211	5,359	580	3,904	5,246	(NA)	(NA)
Without drilling....	17	-	31	227	22	43	157	1,511	312	98	1,590	331	(NA)	(NA)
Nonproducing operations	33	-	47	418	23	45	251	( <sup>5</sup> )	2,884	59	-	1,499	(NA)	(NA)
Oklahoma.....	1,603	106	18,625	126,772	9,822	18,694	51,580	627,365	213,524	40,674	705,537	176,026	22,933	523,960
Producing operations, total.....	1,527	105	18,479	126,145	9,765	18,576	51,305	628,503	212,026	40,518	705,537	175,510	22,883	524,537
With drilling.....	705	88	15,823	115,555	7,659	15,069	43,918	554,394	199,057	38,931	622,664	169,718	19,996	471,923
Without drilling.....	822	17	2,656	10,590	2,106	3,507	7,387	74,109	12,969	1,587	82,873	5,792	2,887	52,614
Oil wells only.....	1,068	33	4,085	16,907	3,212	5,609	11,805	102,004	31,908	6,056	120,826	19,142	5,973	106,984
With drilling.....	413	22	2,157	9,403	1,711	3,258	6,698	61,308	23,089	4,942	73,670	15,669	3,654	68,898
Without drilling.....	655	11	1,928	7,504	1,501	2,351	5,107	40,696	8,819	1,114	47,156	3,473	2,319	38,086
Oil and gas wells.....	369	70	14,254	108,575	6,430	12,727	38,908	497,216	177,386	34,237	553,961	154,878	16,573	411,682
With drilling.....	228	65	13,612	105,828	5,903	11,712	36,929	469,668	173,719	31,788	524,070	153,105	16,084	400,125
Without drilling.....	141	5	642	2,747	527	1,015	1,979	27,548	3,667	449	29,891	1,773	489	11,557
Gas wells only.....	90	2	140	663	123	240	592	29,283	2,732	225	30,750	1,490	337	5,871
With drilling.....	64	1	54	324	45	99	291	23,418	2,249	201	24,924	944	258	2,900
Without drilling.....	26	1	86	339	78	141	301	5,865	483	24	5,826	546	79	2,971
Nonproducing operations..	76	1	146	627	57	118	275	( <sup>5</sup> )	1,498	156	-	516	50	( <sup>5</sup> )

See footnotes at end of table.



TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man- hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)		(\$1,000)	(\$1,000)			(\$1,000)	(number)
1311.—CRUDE PETROLEUM AND NATURAL GAS—Continued														
Division, State, and Type of Operation—Continued														
West South Central—Continued														
Texas, total.....	4,941	324	54,111	399,068	25,967	52,336	156,948	3,266,993	875,757	139,829	3,574,444	708,135	66,669	2,878,841
Producing operations, total.....	4,643	320	53,682	396,283	25,786	51,995	155,701	3,275,171	862,197	139,135	3,574,444	702,059	66,529	2,883,420
With drilling.....	2,112	265	44,214	344,871	19,832	40,501	127,537	2,845,248	798,545	128,583	3,094,495	677,881	60,974	2,721,147
Without drilling.....	2,531	55	9,468	51,412	5,954	11,494	28,164	429,923	63,652	10,552	479,949	24,178	5,555	162,273
Oil wells only.....	2,986	56	9,389	47,912	6,495	12,430	29,186	408,817	127,982	20,762	487,088	70,473	11,775	270,651
With drilling.....	1,167	35	4,169	22,886	3,076	6,089	14,974	212,572	95,093	17,172	263,511	61,326	7,581	163,859
Without drilling.....	1,819	21	5,220	25,026	3,419	6,341	14,212	196,245	32,889	3,590	223,577	9,147	4,194	106,792
Oil and gas wells.....	1,320	256	43,534	344,136	18,846	38,701	124,188	2,752,746	716,739	115,248	2,966,690	618,043	53,821	2,598,929
With drilling.....	782	225	39,647	319,748	16,544	34,021	111,469	2,546,180	688,860	109,478	2,739,483	605,035	52,614	2,553,851
Without drilling.....	538	31	3,887	24,388	2,302	4,680	12,719	206,566	27,879	5,770	227,207	13,008	1,207	45,078
Gas wells only.....	337	8	759	4,235	445	864	2,327	113,608	17,476	3,125	120,666	13,543	933	13,840
With drilling.....	163	5	398	2,237	212	391	1,094	86,496	14,592	1,933	91,501	11,520	779	3,437
Without drilling.....	174	3	361	1,998	233	473	1,233	27,112	2,884	1,192	29,165	2,023	154	10,403
Nonproducing operations..	298	4	429	2,785	181	341	1,247	( <sup>2</sup> )	13,560	694	-	6,076	140	( <sup>2</sup> )
Texas Gulf Coast A, total	425	57	14,770	128,927	4,238	8,693	29,291	548,556	135,841	20,570	607,259	97,708	(NA)	(NA)
Producing operations, total.....	397	57	14,734	128,683	4,224	8,662	29,206	550,076	133,420	20,522	607,259	96,759	(NA)	(NA)
With drilling.....	155	48	13,701	122,104	3,617	7,457	26,038	494,775	127,635	19,718	547,586	93,542	(NA)	(NA)
Without drilling.....	242	9	1,033	6,579	607	1,205	3,168	55,301	5,785	804	58,673	3,217	(NA)	(NA)
Oil wells only.....	211	6	653	3,717	521	959	2,566	23,517	6,563	1,236	27,680	3,636	(NA)	(NA)
With drilling.....	51	5	305	1,754	256	449	1,430	9,304	4,015	915	11,846	2,388	(NA)	(NA)
Without drilling.....	160	1	348	1,963	265	510	1,136	14,213	2,548	321	15,834	1,248	(NA)	(NA)
Oil and gas wells....	159	50	13,999	124,572	3,672	7,646	26,502	521,718	126,323	19,261	574,561	92,741	(NA)	(NA)
With drilling.....	98	43	13,375	120,202	3,355	6,996	24,574	484,213	123,327	18,799	535,538	90,801	(NA)	(NA)
Without drilling....	61	7	624	4,370	317	650	1,928	37,505	2,996	462	39,023	1,940	(NA)	(NA)
Gas wells only.....	27	1	82	394	31	57	138	4,841	534	25	5,018	382	(NA)	(NA)
With drilling.....	6	-	21	148	6	12	34	1,258	293	4	1,202	353	(NA)	(NA)
Without drilling...	21	1	61	246	25	45	104	3,583	241	21	3,816	29	(NA)	(NA)
Nonproducing operations	28	-	36	244	14	31	85	( <sup>2</sup> )	2,421	48	-	949	(NA)	(NA)
Texas Gulf Coast B.....	291	19	1,608	10,624	1,191	2,427	7,553	233,156	51,598	5,900	251,476	39,178	(NA)	(NA)
Producing operations, total.....	267	19	1,601	10,603	1,190	2,426	7,547	234,112	50,291	5,855	251,476	38,782	(NA)	(NA)
With drilling.....	144	17	1,312	8,797	985	2,029	6,475	205,879	47,926	5,571	221,533	37,843	(NA)	(NA)
Without drilling.....	123	2	289	1,806	205	397	1,072	28,233	2,365	284	29,943	939	(NA)	(NA)
Oil wells only.....	42	-	52	196	45	80	176	1,307	1,072	203	1,990	592	(NA)	(NA)
With drilling.....	8	-	18	52	14	27	40	( <sup>2</sup> )	866	189	498	546	(NA)	(NA)
Without drilling...	34	-	34	144	31	53	136	1,318	206	14	1,492	46	(NA)	(NA)
Oil and gas wells....	163	18	1,454	9,964	1,087	2,136	6,727	225,153	46,291	5,426	239,973	36,897	(NA)	(NA)
With drilling.....	114	16	1,243	8,612	945	1,972	6,317	202,726	44,555	5,201	216,329	36,153	(NA)	(NA)
Without drilling...	49	2	211	1,352	142	164	410	22,427	1,736	225	23,644	744	(NA)	(NA)
Gas wells only.....	62	1	95	443	58	91	288	7,652	2,928	226	9,513	1,293	(NA)	(NA)
With drilling.....	22	1	51	133	26	30	118	3,164	2,505	181	4,706	1,144	(NA)	(NA)
Without drilling...	40	-	44	310	32	61	170	4,488	423	45	4,807	149	(NA)	(NA)
South Texas, total.....	331	32	3,934	29,061	2,256	4,530	14,561	342,667	94,793	10,695	360,235	87,920	(NA)	(NA)
Producing operations, total.....	305	32	3,917	28,996	2,250	4,518	14,536	343,383	93,473	10,543	360,235	87,164	(NA)	(NA)
With drilling.....	138	26	3,291	25,591	1,813	3,646	12,199	304,535	88,139	9,164	317,310	84,528	(NA)	(NA)
Without drilling.....	167	6	626	3,405	437	872	2,337	38,848	5,334	1,379	42,925	2,636	(NA)	(NA)
Oil wells only.....	81	-	210	919	159	290	677	5,942	1,783	173	7,075	823	(NA)	(NA)
With drilling.....	14	-	55	220	46	81	188	1,044	915	117	1,519	557	(NA)	(NA)
Without drilling...	67	-	155	699	113	209	489	4,898	868	56	5,556	266	(NA)	(NA)
Oil and gas wells....	187	31	3,587	27,349	2,024	4,091	13,505	330,617	90,507	9,264	346,204	84,184	(NA)	(NA)
With drilling.....	112	25	3,164	24,888	1,737	3,511	11,854	299,382	86,310	8,851	311,708	82,835	(NA)	(NA)
Without drilling....	75	6	423	2,461	287	580	1,651	31,235	4,197	413	34,496	1,349	(NA)	(NA)
Gas wells only.....	37	1	120	728	67	137	354	6,824	1,183	1,106	6,956	2,157	(NA)	(NA)
With drilling.....	12	1	72	483	30	54	157	4,109	914	196	4,083	1,136	(NA)	(NA)
Without drilling...	25	-	48	245	37	83	197	2,715	269	910	2,873	1,021	(NA)	(NA)
Nonproducing operations	26	-	17	65	6	12	25	( <sup>2</sup> )	1,320	152	-	756	(NA)	(NA)

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Industry, geographic area, and type of operation <sup>1</sup>	1963												1958	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man- hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
1311.—CRUDE PETROLEUM AND NATURAL GAS—Continued														
Division, State, and Type of Operation—Continued														
West South Central—Continued														
Texas—Continued														
Southwest Texas, total...	277	9	1,270	7,810	777	1,543	4,259	64,189	18,223	1,531	72,023	11,920	(NA)	(NA)
Producing operations, total.....	252	9	1,249	7,636	766	1,521	4,141	64,537	17,401	1,524	72,023	11,439	(NA)	(NA)
With drilling.....	109	7	771	5,382	491	988	2,981	43,484	14,431	1,308	48,326	10,897	(NA)	(NA)
Without drilling.....	143	2	478	2,254	275	533	1,160	21,053	2,970	216	23,697	542	(NA)	(NA)
Oil wells only.....	196	3	612	3,002	362	703	1,515	23,421	6,891	875	27,787	3,400	(NA)	(NA)
With drilling.....	77	1	183	1,012	124	246	551	10,623	4,448	793	12,766	3,098	(NA)	(NA)
Without drilling...	119	2	429	1,990	238	457	964	12,798	2,443	82	15,021	302	(NA)	(NA)
Oil and gas wells....	46	5	621	4,556	395	802	2,574	39,900	10,291	599	43,042	7,748	(NA)	(NA)
With drilling.....	28	5	586	4,364	366	742	2,429	31,982	9,821	468	34,753	7,518	(NA)	(NA)
Without drilling...	18	-	35	192	29	60	145	7,918	470	131	8,289	230	(NA)	(NA)
Gas wells only.....	10	-	16	78	9	16	52	1,216	219	50	1,194	291	(NA)	(NA)
With drilling.....	4	-	2	6	1	-	1	879	162	47	807	281	(NA)	(NA)
Nonproducing operations	25	-	21	174	11	22	118	( <sup>2</sup> )	822	7	-	481	(NA)	(NA)
North Central Texas A, total.....	797	33	3,883	20,571	2,792	5,698	13,282	177,939	59,709	10,697	200,975	47,370	(NA)	(NA)
Producing operations, total.....	771	33	3,864	20,454	2,780	5,661	13,177	178,657	58,309	10,648	200,975	46,639	(NA)	(NA)
With drilling.....	408	29	2,697	15,310	1,953	4,122	9,778	140,870	50,070	8,831	156,453	43,318	(NA)	(NA)
Without drilling.....	363	4	1,167	5,144	827	1,539	3,399	37,787	8,239	1,817	44,522	3,321	(NA)	(NA)
Oil wells only.....	650	13	2,054	8,649	1,553	3,075	6,076	87,096	26,345	4,964	101,231	17,174	(NA)	(NA)
With drilling.....	341	10	1,162	5,040	947	1,962	3,877	60,683	20,554	4,481	70,081	15,637	(NA)	(NA)
Without drilling...	309	3	892	3,609	606	1,113	2,199	26,413	5,791	483	31,150	1,537	(NA)	(NA)
Oil and gas wells....	110	20	1,787	11,682	1,221	2,578	7,083	91,160	31,854	5,651	99,267	29,398	(NA)	(NA)
With drilling.....	66	19	1,530	10,250	1,003	2,154	5,887	80,162	29,438	4,319	86,302	27,617	(NA)	(NA)
Without drilling...	44	1	257	1,432	218	424	1,196	10,998	2,416	1,332	12,965	1,781	(NA)	(NA)
Nonproducing operations	26	-	19	117	12	37	105	( <sup>2</sup> )	1,400	49	-	731	(NA)	(NA)
North Central Texas B, total.....	544	29	2,429	13,148	1,874	3,593	9,232	120,297	33,761	5,753	130,325	29,486	(NA)	(NA)
Producing operations, total.....	509	28	2,391	12,951	1,860	3,592	9,147	120,860	33,066	5,742	130,325	29,343	(NA)	(NA)
With drilling.....	247	24	1,640	9,097	1,360	2,620	6,932	95,829	28,415	5,165	101,560	27,849	(NA)	(NA)
Without drilling.....	262	4	751	3,854	500	972	2,215	25,031	4,651	577	28,765	1,494	(NA)	(NA)
Oil wells only.....	378	9	1,132	5,983	825	1,602	3,811	43,107	15,666	2,623	54,011	7,385	(NA)	(NA)
With drilling.....	163	6	556	2,929	464	903	2,249	26,986	12,929	2,203	35,805	6,313	(NA)	(NA)
Without drilling...	215	3	576	3,054	361	699	1,562	16,121	2,737	420	18,206	1,072	(NA)	(NA)
Oil and gas wells....	120	19	1,236	6,860	1,030	1,979	5,314	77,204	17,226	3,094	75,653	21,871	(NA)	(NA)
With drilling.....	80	18	1,067	6,096	894	1,713	4,673	68,822	15,356	2,942	65,654	21,466	(NA)	(NA)
Without drilling...	40	1	169	764	136	266	641	8,382	1,870	152	9,999	405	(NA)	(NA)
Gas wells only.....	11	-	23	108	5	11	22	549	174	25	661	87	(NA)	(NA)
Without drilling...	7	-	6	36	3	7	12	528	44	5	560	17	(NA)	(NA)
Nonproducing operations	35	1	38	197	14	1	85	( <sup>2</sup> )	695	11	-	143	(NA)	(NA)
East Texas A, total.....	246	13	5,520	44,998	836	1,619	4,375	92,005	26,242	3,384	91,087	30,544	(NA)	(NA)
Producing operations, total.....	218	11	5,403	44,018	785	1,524	4,019	92,430	25,121	3,315	91,087	29,779	(NA)	(NA)
With drilling.....	80	6	4,750	40,725	304	594	1,617	55,405	18,842	2,533	49,049	27,731	(NA)	(NA)
Without drilling.....	138	5	653	3,293	481	930	2,402	37,025	6,279	782	42,038	2,048	(NA)	(NA)
Oil wells only.....	158	1	479	2,299	287	525	1,317	27,960	8,610	1,406	33,276	4,700	(NA)	(NA)
With drilling.....	51	-	148	711	97	164	427	14,507	5,975	923	17,289	4,116	(NA)	(NA)
Without drilling...	107	1	331	1,588	190	361	890	13,453	2,635	483	15,987	584	(NA)	(NA)
Oil and gas wells....	48	10	4,915	41,687	491	985	2,673	63,004	15,457	1,808	55,709	24,560	(NA)	(NA)
With drilling.....	21	6	4,594	39,983	201	418	1,162	39,619	11,927	1,509	29,950	23,105	(NA)	(NA)
Without drilling...	27	4	321	1,704	290	567	1,511	23,385	3,530	299	25,759	1,455	(NA)	(NA)
Gas wells only.....	12	-	9	32	7	14	29	1,466	1,054	101	2,102	519	(NA)	(NA)
With drilling.....	8	-	8	31	6	12	28	1,279	940	101	1,810	510	(NA)	(NA)
Nonproducing operations	28	2	117	980	51	95	356	( <sup>2</sup> )	1,121	69	-	765	(NA)	(NA)

See footnotes at end of table.



TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Industry, geographic area, and type of operation <sup>1</sup>	1963												1958	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man- hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
1311.—CRUDE PETROLRUM AND NATURAL GAS—Continued														
<u>Division, State, and Type of Operation—Continued</u>														
West South Central—Continued														
Texas—Continued														
East Texas B, total.....	507	33	4,133	25,752	2,905	5,841	16,379	295,173	50,608	10,450	321,859	34,372	(NA)	(NA)
Producing operations, total.....	484	33	4,110	25,663	2,896	5,825	16,341	295,565	49,814	10,344	321,859	33,864	(NA)	(NA)
With drilling.....	127	26	2,869	19,819	1,970	4,116	12,168	243,606	41,688	8,699	263,230	30,763	(NA)	(NA)
Without drilling.....	357	7	1,241	5,844	926	1,709	4,173	51,959	8,126	1,645	58,629	3,101	(NA)	(NA)
Oil wells only.....	313	4	952	3,984	730	1,311	2,840	38,696	9,160	837	44,892	3,801	(NA)	(NA)
With drilling.....	37	1	168	747	148	292	671	13,237	4,720	526	15,470	3,013	(NA)	(NA)
Without drilling.....	276	3	784	3,237	582	1,019	2,169	25,459	4,440	311	29,422	788	(NA)	(NA)
Oil and gas wells....	125	28	3,049	21,124	2,090	4,355	13,122	233,985	37,750	9,025	251,492	29,268	(NA)	(NA)
With drilling.....	63	25	2,678	18,957	1,806	3,787	11,408	214,108	34,740	7,831	229,524	27,155	(NA)	(NA)
Without drilling....	62	3	371	2,167	284	568	1,714	19,877	3,010	1,194	21,968	2,113	(NA)	(NA)
Gas wells only.....	46	1	109	555	76	159	379	22,884	2,904	482	25,475	795	(NA)	(NA)
With drilling.....	27	-	23	115	16	37	89	16,261	2,228	342	18,236	595	(NA)	(NA)
Without drilling....	19	1	86	440	60	122	290	6,623	676	140	7,239	200	(NA)	(NA)
Nonproducing operations	23	-	23	89	9	16	38	( <sup>2</sup> )	794	106	-	508	(NA)	(NA)
West Texas A, total.....	939	65	12,631	92,745	6,623	13,443	42,609	1,088,931	294,657	51,541	1,202,905	232,224	(NA)	(NA)
Producing operations, total.....	883	64	12,494	91,946	6,563	13,323	42,236	1,090,987	292,153	51,420	1,202,905	231,655	(NA)	(NA)
With drilling.....	453	52	10,048	76,727	5,402	11,054	36,763	996,828	279,165	49,541	1,098,477	227,057	(NA)	(NA)
Without drilling.....	430	12	2,446	15,221	1,161	2,269	5,473	94,159	12,988	1,879	104,428	4,598	(NA)	(NA)
Oil wells only.....	687	18	2,691	16,239	1,590	3,091	8,096	132,287	38,875	6,381	158,380	19,163	(NA)	(NA)
With drilling.....	344	11	1,378	9,306	830	1,658	4,675	64,090	30,410	5,260	82,907	16,853	(NA)	(NA)
Without drilling....	343	7	1,313	6,933	760	1,433	3,421	68,197	8,465	1,121	75,473	2,310	(NA)	(NA)
Oil and gas wells....	163	43	9,765	75,537	4,943	10,290	34,353	939,769	251,092	44,779	1,025,577	210,063	(NA)	(NA)
With drilling.....	85	41	8,645	67,346	4,554	9,361	32,031	915,754	246,769	44,021	998,650	207,894	(NA)	(NA)
Without drilling....	78	2	1,120	8,191	389	929	2,322	24,015	4,323	758	26,927	2,169	(NA)	(NA)
Gas wells only.....	33	1	38	170	30	61	146	18,931	2,186	260	18,948	2,429	(NA)	(NA)
With drilling.....	24	1	25	73	18	35	57	16,984	1,986	260	16,920	2,310	(NA)	(NA)
Without drilling....	9	-	13	97	12	26	89	1,947	200	-	2,028	119	(NA)	(NA)
Nonproducing operations	56	1	137	799	60	120	373	( <sup>2</sup> )	2,504	121	-	569	(NA)	(NA)
West Texas B, total.....	269	8	915	5,838	715	1,388	4,281	105,117	47,875	8,194	118,379	42,807	(NA)	(NA)
Producing operations, total.....	251	8	908	5,795	715	1,388	4,269	105,754	46,951	8,117	118,379	42,443	(NA)	(NA)
With drilling.....	90	7	602	4,138	460	896	2,989	88,431	43,268	7,397	98,316	40,780	(NA)	(NA)
Without drilling.....	161	1	306	1,657	255	492	1,280	17,323	3,683	720	20,063	1,663	(NA)	(NA)
Oil wells only.....	159	1	322	1,721	261	490	1,357	17,159	9,160	1,435	20,051	7,703	(NA)	(NA)
With drilling.....	42	1	126	754	91	190	549	10,026	7,524	1,200	11,589	7,161	(NA)	(NA)
Without drilling....	117	-	196	967	170	300	808	7,133	1,636	235	8,462	542	(NA)	(NA)
Oil and gas wells....	82	6	562	3,939	437	865	2,819	87,322	37,084	6,608	96,697	34,317	(NA)	(NA)
With drilling.....	45	6	475	3,381	368	706	2,437	77,864	35,574	6,184	86,010	33,612	(NA)	(NA)
Without drilling....	37	-	87	558	69	159	382	9,458	1,510	424	10,687	705	(NA)	(NA)
Gas wells only.....	10	1	24	135	17	33	93	1,273	707	74	1,631	423	(NA)	(NA)
With drilling.....	3	-	1	3	-	-	3	541	170	13	717	7	(NA)	(NA)
Without drilling....	7	1	23	132	16	33	90	732	537	61	914	416	(NA)	(NA)
Nonproducing operations	18	-	7	43	-	-	12	( <sup>2</sup> )	924	77	-	364	(NA)	(NA)
Texas Panhandle.....	315	26	3,018	19,594	1,760	3,561	11,126	198,963	62,450	11,114	217,921	54,606	(NA)	(NA)
Producing operations, total.....	306	26	3,011	19,538	1,757	3,555	11,082	199,167	62,198	11,105	217,921	54,549	(NA)	(NA)
With drilling.....	161	23	2,533	17,183	1,477	2,979	9,597	175,606	58,966	10,656	191,655	53,573	(NA)	(NA)
Without drilling.....	145	3	478	2,355	280	576	1,485	23,561	3,232	449	26,266	976	(NA)	(NA)
Oil wells only.....	111	1	232	1,203	162	304	755	8,325	3,857	629	10,715	2,096	(NA)	(NA)
With drilling.....	39	-	70	361	59	117	317	2,083	2,737	565	3,741	1,644	(NA)	(NA)
Without drilling....	72	1	162	842	103	187	438	6,242	1,120	64	6,974	452	(NA)	(NA)
Oil and gas wells....	117	23	2,559	16,866	1,456	2,974	9,519	143,271	52,864	9,733	158,515	47,353	(NA)	(NA)
With drilling.....	70	21	2,290	15,669	1,315	2,661	8,697	131,548	51,043	9,353	145,065	46,879	(NA)	(NA)
Without drilling....	47	2	269	1,197	141	313	822	11,723	1,821	380	13,450	474	(NA)	(NA)
Gas wells only.....	78	2	220	1,469	139	277	808	47,571	5,477	743	48,691	5,100	(NA)	(NA)
With drilling.....	52	2	173	1,153	103	201	583	41,975	5,186	738	42,849	5,050	(NA)	(NA)
Without drilling....	26	-	47	316	36	76	225	5,596	291	5	5,842	50	(NA)	(NA)

See footnotes at end of table.

**TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man- hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
1311.—CRUDE PETROLEUM AND NATURAL GAS—Continued														
<u>Division, State, and Type of Operation—Continued</u>														
Mountain.....	1,109	114	11,496	85,966	6,610	13,194	44,706	969,292	284,797	60,712	1,062,182	252,619	14,501	841,883
Producing operations, total.....	976	111	11,285	84,619	6,455	12,894	43,663	973,659	275,181	60,530	1,062,182	247,188	13,671	851,286
With drilling.....	481	98	9,840	76,678	5,432	11,110	38,346	911,475	266,258	59,523	994,322	242,934	11,947	744,564
Without drilling.....	495	13	1,445	7,941	1,023	1,784	5,317	62,184	8,923	1,007	67,860	4,254	1,724	106,722
Oil wells only.....	585	28	2,418	16,773	1,609	3,035	10,579	166,904	51,747	10,022	181,925	46,748	3,676	207,741
With drilling.....	237	22	1,596	12,674	1,010	2,048	7,834	134,196	46,474	9,596	144,954	45,312	2,374	117,546
Without drilling.....	348	6	822	4,099	599	987	2,745	32,708	5,273	426	36,971	1,436	1,302	90,195
Oil and gas wells.....	297	76	8,535	65,812	4,644	9,467	31,995	783,938	213,746	49,343	858,466	188,561	9,665	630,234
With drilling.....	208	72	8,053	62,645	4,322	8,861	29,897	760,450	211,072	48,857	833,573	186,806	9,335	615,748
Without drilling.....	89	4	482	3,167	322	606	2,098	23,488	2,674	486	24,893	1,755	330	14,486
Gas wells only.....	94	7	332	2,034	202	392	1,089	22,817	9,688	1,165	21,791	11,879	330	13,311
With drilling.....	36	4	191	1,359	100	201	615	16,829	8,712	1,070	15,795	10,816	238	11,270
Without drilling.....	58	3	141	675	102	191	474	5,988	976	95	5,996	1,063	92	2,041
Nonproducing operations....	133	3	211	1,347	155	300	1,043	( <sup>2</sup> )	9,616	182	-	5,431	830	( <sup>2</sup> )
Montana, total.....	158	14	1,110	7,787	667	1,301	4,230	59,045	29,756	9,608	73,930	24,479	1,597	63,121
Producing operations, total.....	143	13	1,078	7,571	638	1,247	4,021	60,790	27,476	9,586	73,930	23,922	1,472	63,998
With drilling.....	41	11	868	6,557	483	968	3,284	56,423	26,556	9,388	69,232	23,135	1,098	58,744
Without drilling.....	102	2	210	1,014	155	279	737	4,367	920	198	4,698	787	374	5,254
Oil wells only.....	108	7	493	3,274	343	688	2,260	26,749	9,368	1,856	30,051	7,922	905	51,978
With drilling.....	25	6	372	2,644	256	535	1,811	23,790	8,755	1,842	26,527	7,860	687	48,816
Without drilling.....	83	1	121	630	87	153	449	2,959	613	14	3,524	62	218	3,162
Nonproducing operations..	15	1	32	216	29	54	209	( <sup>2</sup> )	2,280	22	-	557	125	( <sup>2</sup> )
Wyoming, total.....	205	26	2,918	23,391	1,775	3,591	13,153	334,324	75,186	19,111	364,782	63,839	3,710	272,602
Producing operations, total.....	173	26	2,892	23,205	1,764	3,568	13,079	335,417	73,077	19,111	364,782	62,823	3,630	274,664
With drilling.....	90	25	2,702	22,129	1,625	3,311	12,312	323,954	71,709	18,865	352,454	62,074	3,391	267,441
Without drilling.....	83	1	190	1,076	139	257	767	11,463	1,368	246	12,328	749	239	7,223
Oil wells only.....	129	6	470	3,507	378	719	2,736	28,311	11,748	2,828	33,592	9,295	703	28,149
With drilling.....	51	6	324	2,733	258	500	2,090	21,209	10,672	2,678	25,572	8,987	483	21,882
Without drilling.....	78	-	146	774	120	219	646	7,102	1,076	150	8,020	308	220	6,267
Nonproducing operations..	32	-	26	186	11	23	74	( <sup>2</sup> )	2,109	-	-	1,016	80	( <sup>2</sup> )
Colorado, total.....	237	25	2,702	22,831	1,108	2,229	8,319	109,921	26,531	5,815	119,650	22,617	3,665	132,435
Producing operations, total.....	208	25	2,646	22,447	1,069	2,154	8,022	110,412	25,652	5,775	119,650	22,189	3,295	135,297
With drilling.....	130	20	2,179	19,361	799	1,647	6,322	102,333	24,161	5,534	110,658	21,370	2,523	125,724
Without drilling.....	78	5	467	3,086	270	507	1,700	8,079	1,491	241	8,992	819	772	79,573
Oil wells only.....	112	6	671	5,167	366	708	2,745	18,820	7,053	688	19,441	7,120	1,050	75,491
With drilling.....	65	4	429	3,691	225	451	1,968	13,600	6,014	629	13,404	6,839	449	6,113
Without drilling.....	49	2	242	1,476	141	257	777	5,220	1,039	59	6,037	281	601	69,378
Oil and gas wells.....	73	17	1,884	16,725	640	1,324	4,927	86,879	17,811	5,022	96,954	12,758	2,163	54,203
With drilling.....	54	15	1,697	15,314	539	1,127	4,140	84,712	17,489	4,840	94,463	12,578	(NA)	(NA)
Without drilling.....	19	2	187	1,411	101	197	787	2,167	322	182	2,491	180	(NA)	(NA)
Gas wells only.....	23	2	91	555	63	122	350	4,713	788	65	3,255	2,311	82	5,597
Nonproducing operations..	29	-	56	384	39	75	297	( <sup>2</sup> )	879	40	-	428	370	( <sup>2</sup> )
New Mexico, total.....	420	41	4,215	27,903	2,752	5,465	16,890	376,268	118,592	18,621	401,682	111,799	4,605	314,428
Producing operations, total.....	396	39	4,161	27,610	2,703	5,368	16,617	377,143	116,852	18,594	401,682	110,907	4,574	316,010
With drilling.....	185	35	3,629	25,064	2,272	4,684	14,642	343,799	112,617	18,306	365,285	109,437	4,291	302,848
Without drilling.....	211	4	532	2,546	431	684	1,975	33,344	4,235	288	36,397	1,470	283	13,162
Oil wells only.....	213	7	696	4,185	451	770	2,319	51,075	15,129	2,601	54,134	14,671	644	31,518
With drilling.....	81	4	396	3,038	205	423	1,468	34,331	12,689	2,400	35,497	13,923	426	21,332
Without drilling.....	132	3	300	1,147	246	347	851	16,744	2,440	201	18,637	748	218	10,186
Oil and gas wells.....	136	30	3,352	22,633	2,192	4,475	13,927	310,519	94,296	15,304	331,974	88,145	3,879	281,306
With drilling.....	87	29	3,146	21,397	2,024	4,173	12,904	297,192	92,894	15,280	317,640	87,726	3,832	279,049
Without drilling.....	49	1	206	1,236	168	302	1,023	13,327	1,402	24	14,334	419	47	2,257
Gas wells only.....	47	2	113	792	60	123	371	15,549	7,427	689	15,574	8,091	51	3,186
With drilling.....	17	2	87	629	43	88	270	12,276	7,034	626	12,148	7,788	(NA)	(NA)
Without drilling.....	30	-	26	163	17	35	101	3,273	393	63	3,426	303	(NA)	(NA)
Nonproducing operations..	24	2	54	293	49	97	273	( <sup>2</sup> )	1,740	27	-	892	31	( <sup>2</sup> )

See footnotes at end of table.

**TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man- hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
1311.—CRUDE PETROLEUM AND NATURAL GAS—Continued														
Division, State, and Type of Operation—Continued														
Mountain—Continued														
New Mexico—Continued														
East New Mexico, total...	309	30	2,717	19,022	1,824	3,581	11,635	302,511	85,112	12,428	324,620	75,431	(NA)	(NA)
Producing operations, total.....	295	29	2,688	18,908	1,799	3,530	11,533	302,615	84,398	12,408	324,620	74,801	(NA)	(NA)
With drilling.....	128	26	2,231	16,786	1,411	2,928	9,792	274,148	80,678	12,192	293,379	73,639	(NA)	(NA)
Without drilling.....	167	3	457	2,122	388	602	1,741	28,467	3,720	216	31,241	1,162	(NA)	(NA)
Oil wells only.....	183	5	562	3,264	418	705	2,160	37,919	13,435	2,437	44,936	8,855	(NA)	(NA)
With drilling.....	64	3	306	2,332	196	402	1,414	22,810	11,313	2,245	28,132	8,236	(NA)	(NA)
Without drilling...	119	2	256	932	222	303	746	15,109	2,122	192	16,804	619	(NA)	(NA)
Oil and gas wells....	104	24	2,121	15,622	1,376	2,815	9,351	263,876	70,296	9,961	278,758	65,375	(NA)	(NA)
With drilling.....	62	23	1,925	14,454	1,215	2,526	8,378	251,211	68,924	9,937	265,114	64,958	(NA)	(NA)
Without drilling...	42	1	196	1,168	161	289	973	12,665	1,372	24	13,644	417	(NA)	(NA)
Gas wells only.....	8	-	5	22	5	10	22	820	667	10	926	571	(NA)	(NA)
Nonproducing operations	14	1	29	114	25	51	102	( <sup>5</sup> )	714	20	-	630	(NA)	(NA)
West New Mexico, total...	111	11	1,498	8,881	928	1,884	5,255	73,757	33,480	6,193	77,062	36,368	(NA)	(NA)
Producing operations, total.....	101	10	1,473	8,702	904	1,838	5,084	74,528	32,454	6,186	77,062	36,106	(NA)	(NA)
With drilling.....	57	9	1,398	8,278	861	1,756	4,850	69,651	31,939	6,114	71,906	35,798	(NA)	(NA)
Without drilling.....	44	1	75	424	43	82	234	4,877	515	72	5,156	308	(NA)	(NA)
Oil wells only.....	30	2	134	921	33	65	159	13,156	1,694	164	9,198	5,816	(NA)	(NA)
With drilling.....	17	1	90	706	9	21	54	11,521	1,376	155	7,365	5,687	(NA)	(NA)
Without drilling...	13	1	44	215	24	44	105	1,635	318	9	1,833	129	(NA)	(NA)
Oil and gas wells....	32	6	1,231	7,011	816	1,660	4,576	46,643	24,000	5,343	53,216	22,770	(NA)	(NA)
With drilling.....	25	6	1,221	6,943	809	1,647	4,526	45,981	23,970	5,343	52,526	22,768	(NA)	(NA)
Without drilling...	7	-	10	68	7	130	50	662	30	-	690	2	(NA)	(NA)
Gas wells only.....	39	2	108	770	55	113	349	14,729	6,760	679	14,648	7,520	(NA)	(NA)
Nonproducing operations	10	1	25	179	24	46	171	( <sup>5</sup> )	1,026	7	-	262	(NA)	(NA)
Utah, total.....	68	8	533	3,959	298	594	2,063	89,295	32,764	7,464	101,568	27,955	848	60,521
Producing operations, total.....	46	8	502	3,750	279	553	1,913	89,577	31,355	7,417	101,568	26,781	(NA)	(NA)
With drilling.....	31	7	462	3,567	253	500	1,786	84,915	30,558	7,408	96,450	26,431	(NA)	(NA)
Without drilling.....	15	1	40	183	26	53	127	4,662	797	9	5,118	350	(NA)	(NA)
Oil wells only.....	17	2	82	582	71	150	519	41,844	8,250	2,029	44,596	7,527	(NA)	(NA)
With drilling.....	12	2	71	530	66	139	497	41,231	8,185	2,029	43,918	7,527	(NA)	(NA)
Oil and gas wells....	18	5	369	2,868	182	351	1,276	45,852	22,227	5,198	54,850	18,427	(NA)	(NA)
With drilling.....	15	5	367	2,859	180	347	1,267	43,358	21,822	5,198	51,967	18,411	(NA)	(NA)
Gas wells only.....	11	1	51	300	26	52	118	1,881	878	190	2,122	827	(NA)	(NA)
Without drilling....	7	1	27	122	19	38	96	1,555	327	9	1,557	334	(NA)	(NA)
Nonproducing operations..	22	-	31	209	19	41	150	( <sup>5</sup> )	1,409	47	-	1,174	(NA)	(NA)
Pacific, total.....	524	51	13,543	108,941	8,584	16,740	63,430	914,019	265,159	23,528	988,943	213,763	16,746	<sup>2</sup> 945,738
Producing operations, total	459	47	13,266	105,932	8,457	16,496	62,106	918,539	241,840	22,950	988,943	194,386	<sup>2</sup> 16,520	<sup>2</sup> 947,251
With drilling.....	149	38	12,012	98,122	7,747	15,180	58,290	887,698	236,427	22,325	953,511	192,939	<sup>2</sup> 14,826	<sup>2</sup> 901,117
Without drilling.....	310	9	1,254	7,810	710	1,316	3,816	30,841	5,413	625	35,432	1,447	<sup>2</sup> 1,694	<sup>2</sup> 46,134
Oil wells only.....	361	20	3,369	23,902	2,261	4,433	14,320	228,061	41,327	7,385	254,671	22,102	<sup>2</sup> 5,095	<sup>2</sup> 274,765
With drilling.....	88	12	2,364	18,058	1,654	3,342	11,168	203,883	37,202	6,900	226,927	21,058	<sup>2</sup> 3,735	<sup>2</sup> 230,555
Without drilling.....	273	8	1,005	5,844	607	1,091	3,152	24,178	4,125	485	27,744	1,044	<sup>2</sup> 1,360	<sup>2</sup> 44,210
Oil and gas wells....	74	27	9,829	81,405	6,156	11,981	47,441	683,347	198,048	15,382	726,463	170,314	<sup>2</sup> 11,374	<sup>2</sup> 670,712
With drilling.....	49	26	9,596	79,544	6,065	11,781	46,858	677,327	196,840	15,242	719,497	169,912	<sup>2</sup> 11,046	<sup>2</sup> 668,914
Without drilling.....	25	1	233	1,861	91	200	583	6,020	1,208	140	6,966	402	<sup>2</sup> 328	<sup>2</sup> 1,798
Gas wells only.....	24	-	68	625	40	82	345	7,131	2,465	183	7,809	1,970	<sup>2</sup> 51	<sup>2</sup> 1,774
With drilling.....	12	-	52	520	28	57	264	6,488	2,385	183	7,087	1,969	(NA)	(NA)
Without drilling.....	12	-	16	105	12	25	81	643	80	-	722	1	(NA)	(NA)
Nonproducing operations....	65	4	277	3,009	127	244	1,324	( <sup>5</sup> )	23,319	578	-	19,377	<sup>2</sup> 145	( <sup>5</sup> )

Note: For explanations of column captions see appendix A.

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>General statistics for some States are not shown separately in this table in order to avoid disclosing figures for individual companies or because of the relatively small size of the statistics. Such States are shown below for the Crude Petroleum and Natural Gas Industry in 1963 with the number of establishments in each State (and in parentheses the number of employees or employee size range): New Jersey offices (20-49); Minnesota offices (50-99); Missouri, 13 (100-249); South Dakota, 11 (0-4); Delaware offices (5-9); Maryland 4 (20-49); District of Columbia offices (0-4); Virginia, 6 (5-9); Tennessee, 13 (8); Nevada, 4 (3).

<sup>2</sup>Excludes data for Alaska.

<sup>3</sup>Includes data for central offices or related facilities in New Jersey.

<sup>4</sup>Includes data for central offices and related facilities in Wisconsin.

<sup>5</sup>Not shown since the cost of supplies, purchased fuel and electricity, contract work, and purchased machinery installed exceeds the value of shipments and receipts plus capital expenditures.

<sup>6</sup>Includes data for Georgia and central offices or related facilities in Delaware.

TABLE 2B. General Statistics for the Industry, by County: 1963 and 1958

(For this table selected data for which totals only were reported for each State or district, were allocated by county on the basis of county data reported for number of employees, quantity of oil and gas shipped, receipts for services, if any, and capital expenditures)

Division, State, county, and district	1963												1958	
	County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees on March 15	Value of shipments and receipts
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
United States, total....	30,038	1,253	145,244	1,016,431	83,444	166,305	494,910	9,016,372	2,666,071	421,250	9,893,763	2,209,930	180,042	28,385,906
Middle Atlantic, total.....	1,011	48	4,702	25,340	2,966	5,871	13,690	50,413	18,776	3,610	56,512	16,287	5,106	57,222
New York.....	191	11	3,864	35,857	494	999	2,423	7,970	3,825	522	9,135	3,182	965	7,725
Allegany.....	80	4	287	1,342	211	436	809	3,870	1,156	95	4,406	715	455	4,457
Cattaraugus.....	35	1	92	434	85	166	392	4,212	854	162	4,310	918	133	1,944
Undistributed by county.	7	-	12	46	8	17	29	173	30	-	189	14	33	702
Pennsylvania.....	820	37	3,838	19,483	2,472	4,872	11,267	42,443	14,951	3,088	47,377	13,105	4,141	49,497
Allegheny.....	42	3	241	1,776	77	157	395	584	532	180	956	340	(NA)	(NA)
Armstrong.....	47	-	102	471	84	169	369	3,828	996	139	3,826	1,137	200	2,896
Bedford.....	3	-	14	87	13	27	81	2,412	1,220	52	2,296	1,388	(NA)	(NA)
Butler.....	38	1	152	762	134	268	674	374	289	139	666	136	(NA)	(NA)
Cameron.....	12	-	11	65	6	13	40	968	346	87	1,295	106	(NA)	(NA)
Clarion.....	33	2	107	467	82	135	304	973	296	70	996	343	(NA)	(NA)
Clearfield.....	15	-	50	306	24	52	128	1,718	506	46	1,898	372	62	5,061
Elk.....	20	2	180	943	91	187	461	1,309	611	357	1,746	531	117	2,156
Fayette.....	10	-	37	217	24	47	141	435	316	56	503	304	(NA)	(NA)
Greene.....	44	-	118	460	90	179	350	972	164	69	1,051	154	166	1,423
Indiana.....	26	1	95	598	77	158	449	3,053	806	115	2,369	1,605	138	2,559
Jefferson.....	20	4	215	1,132	130	259	663	2,234	642	330	2,414	792	131	1,746
McKean.....	187	11	1,220	5,864	855	1,733	3,949	13,266	3,595	214	16,154	921	1,652	20,092
Potter.....	12	2	48	190	32	49	111	697	558	516	313	1,458	(NA)	(NA)
Somerset.....	5	-	8	51	6	14	38	820	616	12	1,413	35	(NA)	(NA)
Venango.....	81	3	532	2,489	242	461	1,018	1,392	395	57	1,642	202	1,933	1,850
Warren.....	67	1	149	463	115	224	369	1,095	601	151	1,334	513	162	1,141
Washington.....	33	2	149	609	126	244	506	1,232	205	35	1,212	260	163	1,322
Westmoreland.....	21	1	66	362	55	106	293	4,169	705	39	3,355	1,558	112	1,682
Undistributed by county.	21	-	38	146	31	58	105	195	66	10	230	41	114	2,009
East North Central, total...	3,128	55	7,975	42,621	5,993	11,483	28,541	277,357	80,333	16,227	330,230	43,687	11,311	308,553
Ohio.....	819	10	1,573	7,686	1,101	2,117	4,355	20,833	13,749	2,192	26,347	10,427	2,988	22,954
Coshocton.....	37	2	94	429	85	173	377	1,219	758	228	1,568	637	85	2,916
Hooking.....	34	-	61	227	53	98	190	1,661	661	124	1,942	504	(NA)	(NA)
Holmes.....	39	-	103	470	84	163	368	1,333	377	28	1,497	241	67	1,329
Knox.....	31	-	50	162	40	68	121	575	300	51	735	191	(NA)	(NA)
Licking.....	36	2	164	814	142	283	649	1,614	795	83	1,842	650	216	1,632
Medina.....	21	-	63	295	59	145	269	1,661	367	35	1,514	549	(NA)	(NA)
Monroe.....	54	-	24	86	20	36	65	554	131	35	602	118	(NA)	(NA)
Morrow.....	27	1	54	220	31	51	127	1,962	1,905	442	2,619	1,690	(NA)	(NA)
Muskingum.....	30	-	59	270	51	98	233	749	464	56	908	361	85	1,353
Perry.....	50	-	69	272	54	100	197	1,337	664	129	1,607	523	156	1,384
Portage.....	14	1	31	118	27	39	101	1,033	1,836	269	1,580	1,558	(NA)	(NA)
Washington.....	109	-	33	151	25	50	103	1,508	349	53	1,608	302	152	1,234
Wayne.....	32	-	58	274	53	97	234	1,237	494	62	1,536	257	99	4,376
Undistributed by county.	39	-	66	283	43	80	168	629	1,160	304	1,059	1,034	139	2,111
Indiana.....	434	8	1,042	5,698	628	1,087	2,406	21,705	13,448	1,261	32,574	3,840	1,197	31,361
Gibson.....	86	1	160	684	138	241	540	5,378	4,288	286	9,096	856	255	9,961
Knox.....	27	-	25	86	22	35	73	9	1,214	50	1,173	100	(NA)	(NA)
Posey.....	81	1	199	990	149	284	695	10,179	1,631	350	10,801	1,359	196	9,229
Spencer.....	31	-	44	132	39	62	104	505	414	54	900	73	(NA)	(NA)
Vanderburgh.....	73	4	260	2,023	67	132	301	1,402	3,142	103	4,346	301	196	3,881
Undistributed by county.	14	-	32	121	26	47	99	652	230	5	840	47	220	1,393
Illinois.....	1,466	29	4,268	22,507	3,474	6,643	17,146	186,903	39,940	10,762	216,457	21,148	6,100	229,662
Bond.....	16	-	18	67	16	30	59	423	174	23	536	84	20	1,612
Clark.....	30	-	56	222	40	68	135	745	305	40	942	148	118	1,610
Clay.....	97	2	197	899	152	274	624	6,143	1,728	281	7,353	799	346	9,062
Clinton.....	41	-	51	197	38	70	129	3,545	933	94	4,279	293	148	12,254
Coles.....	39	-	43	203	37	68	149	1,950	660	141	2,343	408	95	1,424
Crawford.....	48	3	411	2,487	365	761	2,141	10,166	2,596	680	11,519	1,923	482	9,251
Cumberland.....	5	-	19	105	18	38	101	771	213	7	983	8	45	2,075
De Witt.....	8	-	3	16	2	4	11	692	242	57	831	160	(NA)	(NA)
Edwards.....	46	-	86	437	66	119	283	2,929	829	103	3,561	300	126	3,989

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1963 and 1958—Continued

Division, State, county, and district	1963											1958	
	County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Selected expenses			Capital expenditures	All employees on March 15	Value of shipments and receipts
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages	Value added in mining	Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed			
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
East North Central—Con.													
Illinois—Continued													
Effingham.....	33	1	103	727	21	31	68	963	298	38	1,197	105	1,927
Fayette.....	38	2	228	1,437	185	376	1,031	41,323	3,412	1,962	44,485	228	39,138
Gallatin.....	57	-	86	428	69	135	340	4,233	699	165	4,796	84	7,783
Hamilton.....	60	3	194	1,080	155	297	814	9,127	2,213	382	10,498	224	8,285
Jasper.....	41	-	42	118	37	57	98	669	429	83	1,050	63	5,873
Jefferson.....	64	2	189	924	169	310	763	5,447	2,672	258	7,781	272	7,718
Lawrence.....	68	2	392	2,410	354	725	1,985	18,527	3,264	3,436	20,576	533	15,036
Macon.....	10	-	12	52	6	10	17	579	138	28	650	(NA)	(NA)
Madison.....	16	-	19	48	15	29	37	572	105	16	666	(NA)	(NA)
Marion.....	59	2	323	1,892	229	435	1,313	25,058	3,758	363	28,523	409	20,382
Richland.....	58	-	101	462	76	133	283	2,177	737	260	2,664	443	5,867
Salline.....	32	-	43	182	38	80	152	1,158	180	10	1,211	77	3,053
Webash.....	105	-	233	990	198	368	773	8,105	2,022	286	9,490	318	10,029
Washington.....	37	-	32	112	24	35	66	955	883	83	1,767	53	2,472
Wayne.....	94	3	312	1,410	254	477	1,069	9,182	2,445	346	10,724	538	19,357
White.....	125	4	540	3,003	463	839	2,470	14,705	4,131	713	17,794	530	20,316
Undistributed by county.	35	3	184	685	142	207	408	2,964	943	61	3,806	548	9,263
Michigan.....	407	8	1,092	6,730	790	1,636	4,634	47,916	13,196	2,012	54,852	1,026	24,576
Allegan.....	16	1	72	485	37	73	222	740	114	28	806	44	1,138
Arenac.....	17	-	28	140	24	51	111	675	154	14	831	68	1,526
Bay.....	11	-	26	151	19	46	106	532	150	19	686	(NA)	(NA)
Calhoun.....	13	-	32	201	18	34	109	7,695	781	206	8,416	(NA)	(NA)
Clare.....	13	-	34	210	26	50	156	1,256	364	75	1,608	63	1,803
Gladwin.....	20	1	62	410	57	117	360	1,013	525	61	1,527	76	1,230
Hillsdale.....	23	1	77	391	47	94	249	8,179	2,075	312	9,632	(NA)	(NA)
Isabella.....	17	-	43	216	31	76	158	1,237	231	44	1,381	135	2,437
Jackson.....	17	-	55	379	37	78	237	5,300	1,031	191	6,132	(NA)	(NA)
Kent.....	17	-	40	324	19	36	114	678	133	33	750	(NA)	(NA)
Macomb.....	13	-	21	142	13	25	82	2,452	729	87	1,964	(NA)	(NA)
Mason.....	7	1	34	210	31	78	190	566	434	52	983	69	(NA)
Midland.....	13	1	72	416	67	137	394	578	222	16	724	92	(NA)
Montcalm.....	8	-	18	76	14	28	55	754	135	21	874	36	1,086
Ogemaw.....	17	-	31	183	22	45	108	671	366	114	808	343	(NA)
Osceola.....	11	-	5	23	4	7	16	809	101	10	733	74	1,977
Roscommon.....	3	-	37	273	34	71	243	836	191	30	996	(NA)	(NA)
St. Clair.....	21	1	85	500	53	96	290	6,472	1,632	222	5,914	(NA)	(NA)
Undistributed by county.	20	1	73	492	55	117	380	930	398	166	1,288	26	1,451
West North Central.....	3,326	71	8,494	47,548	6,277	12,709	32,491	455,917	125,842	24,880	527,043	10,991	487,331
North Dakota.....	134	4	428	2,903	281	587	1,815	54,999	15,695	4,606	64,798	559	41,106
Billings.....	5	-	1	7	1	2	7	1,806	458	105	1,801	(NA)	(NA)
Bottineau.....	25	-	47	275	38	77	220	4,407	1,047	275	5,272	11	2,030
Bowman.....	3	-	1	9	1	2	6	1,842	1,658	382	2,348	(NA)	(NA)
Burke.....	30	-	58	351	37	85	226	12,672	4,189	1,071	15,477	58	3,074
McKenzie.....	9	1	60	411	35	73	218	17,113	3,696	1,366	19,217	53	12,187
Renville.....	17	-	14	113	11	24	95	2,275	675	126	2,636	(NA)	(NA)
Williams.....	11	1	142	926	85	179	531	14,740	3,040	985	16,941	179	16,530
Undistributed by county.	5	-	18	166	7	14	57	(4)	631	250	234	52	343
Nebraska.....	224	3	391	2,533	292	593	1,802	50,017	13,299	1,790	57,848	570	57,940
Banner.....	36	-	32	206	23	50	176	10,847	2,497	465	12,745	38	11,234
Cheyenne.....	32	1	91	651	51	103	329	8,159	1,323	206	8,872	162	14,674
Hitchcock.....	11	-	6	21	4	9	14	338	375	80	560	(NA)	(NA)
Kimball.....	55	1	100	650	90	167	577	12,712	2,988	328	14,937	184	25,770
Morrill.....	17	-	19	124	17	34	107	2,860	592	234	3,471	6	1,711
Red Willow.....	24	-	65	422	48	97	278	8,854	2,000	203	9,949	(NA)	(NA)
Scotts Bluff.....	8	-	4	11	2	4	5	1,211	835	90	1,582	(NA)	(NA)
Undistributed by county.	9	-	14	91	9	17	41	999	326	16	1,248	80	1,869
Kansas.....	2,917	59	7,394	40,191	5,696	11,509	28,830	350,739	95,265	18,380	403,579	9,405	387,950
Allen.....	46	-	118	470	77	157	286	1,909	763	182	2,226	104	1,364
Anderson.....	10	-	42	169	36	73	150	507	243	50	748	93	1,138
Barber.....	63	-	117	647	96	199	515	7,273	2,211	701	8,263	211	6,315
Barton.....	162	8	800	4,792	557	1,108	3,119	21,699	6,597	1,245	26,387	1,074	39,567
Butler.....	112	4	510	2,671	400	833	1,936	14,186	5,080	846	17,658	714	21,310

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1963 and 1958—Continued

Division, State, county, and district	1963												1958	
	County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees on March 15	Value of shipments and receipts
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man- hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
West North Central—Con.														
Kansas—Continued														
Chautauqua.....	49	-	92	293	82	169	254	2,007	551	62	2,324	296	156	2,364
Clark.....	23	-	21	91	13	26	51	1,550	492	69	1,919	192	27	1,384
Comanche.....	14	-	3	15	3	6	15	1,762	359	50	1,625	546	(NA)	(NA)
Cowley.....	86	2	199	934	156	311	675	7,079	2,496	601	8,391	1,785	280	10,926
Decatur.....	18	-	28	142	17	37	94	860	258	18	919	217	23	1,167
Edwards.....	28	-	15	68	13	20	53	928	393	58	1,169	210	(NA)	(NA)
Elk.....	28	-	24	69	22	40	60	526	192	56	646	128	(NA)	(NA)
Ellis.....	111	1	300	1,548	242	460	1,186	18,779	5,371	946	22,286	2,810	424	25,606
Ellsworth.....	44	-	55	327	47	87	263	3,279	954	188	3,966	455	133	5,661
Franklin.....	15	-	33	136	24	44	118	598	222	54	663	211	(NA)	(NA)
Graham.....	58	-	125	691	112	206	565	10,739	2,857	527	13,081	1,042	214	18,230
Grant.....	19	2	145	1,073	115	222	847	14,332	1,464	173	15,169	800	78	17,245
Greenwood.....	97	3	334	1,505	235	483	1,120	6,461	2,517	357	8,400	935	487	18,573
Hamilton.....	17	-	10	42	8	16	33	2,214	431	44	1,069	1,620	(NA)	(NA)
Harper.....	34	-	54	368	48	94	314	2,965	962	196	3,391	732	108	3,086
Harvey.....	46	-	43	185	36	64	116	2,071	769	116	2,420	536	(NA)	(NA)
Haskell.....	23	-	40	226	22	45	114	8,116	1,553	344	8,088	1,925	28	3,132
Hodgeman.....	25	-	65	405	56	124	317	5,500	2,171	513	5,029	3,155	(NA)	(NA)
Johnson.....	13	-	4	17	1	2	5	602	260	30	772	120	(NA)	(NA)
Kiowa.....	26	-	7	47	6	11	33	3,591	677	114	3,995	387	59	2,750
McPherson.....	87	1	182	690	150	270	537	4,534	1,612	286	5,790	642	213	10,780
Marion.....	69	-	102	418	80	134	300	3,488	1,117	257	4,257	605	138	6,066
Meade.....	31	-	18	98	14	26	79	3,003	946	111	3,676	384	73	2,861
Miami.....	25	-	32	116	26	52	87	560	254	59	793	80	58	1,365
Montgomery.....	53	1	118	413	80	152	274	1,513	534	96	1,777	366	118	1,352
Morris.....	9	-	15	64	11	21	52	616	194	44	837	17	(NA)	(NA)
Morton.....	39	-	67	460	56	117	389	12,379	2,656	447	13,424	2,058	22	9,182
Neosho.....	37	2	112	425	92	189	341	2,485	960	43	3,157	331	(NA)	(NA)
Ness.....	34	-	48	301	46	93	284	2,274	746	112	1,954	1,178	17	1,149
Norton.....	12	-	23	148	13	28	61	1,697	311	53	2,018	43	12	2,936
Pawnee.....	42	-	42	238	34	59	143	2,625	765	123	2,859	654	68	4,471
Phillips.....	22	1	133	689	53	110	258	4,280	1,306	194	5,417	363	80	5,669
Pratt.....	46	-	77	496	56	114	335	3,206	1,047	192	3,704	741	111	6,409
Rawlins.....	14	-	9	53	6	9	21	1,777	502	66	2,082	263	(NA)	(NA)
Reno.....	44	-	72	336	62	127	259	2,908	946	235	3,185	904	114	3,485
Rice.....	108	2	284	1,473	233	430	1,099	11,865	4,045	1,437	14,034	3,313	365	14,812
Rooks.....	89	2	244	1,341	174	349	923	11,382	3,608	620	14,139	1,471	310	15,011
Rush.....	22	-	42	227	28	62	145	949	376	58	1,004	379	29	2,881
Russell.....	114	3	360	1,980	287	599	1,394	17,984	5,798	1,077	22,052	2,807	503	22,820
Saline.....	37	-	54	198	49	91	175	3,341	710	278	3,737	592	(NA)	(NA)
Sedgwick.....	140	13	731	4,852	319	707	1,830	12,568	3,052	455	13,511	2,564	876	7,384
Seward.....	36	3	174	1,304	92	187	613	5,693	1,109	174	5,942	1,034	87	2,745
Sheridan.....	9	-	16	102	15	31	97	781	129	24	929	5	52	1,168
Stafford.....	108	-	163	828	136	273	647	11,227	3,931	647	13,985	1,820	233	14,740
Stanton.....	14	1	33	238	27	55	203	3,093	480	120	3,515	178	(NA)	(NA)
Stevens.....	26	-	75	532	64	133	448	18,770	2,511	284	20,564	1,001	48	7,968
Sumner.....	57	1	101	507	84	169	399	5,024	1,710	641	6,499	876	125	6,339
Trego.....	30	-	54	323	48	102	245	3,193	749	116	3,669	389	65	4,724
Wabaunsee.....	4	-	4	26	3	7	19	517	123	41	645	36	(NA)	(NA)
Wilson.....	22	-	33	136	27	60	106	1,005	397	76	963	515	(NA)	(NA)
Woodson.....	44	-	47	155	42	81	131	1,486	737	129	1,589	763	79	1,758
Undistributed by county.	63	7	642	3,095	565	1,011	2,657	14,869	4,596	686	15,917	4,234	700	20,754
South Atlantic.....	1,276	30	3,438	15,150	2,598	5,098	10,354	52,060	31,948	4,602	61,472	27,138	3,997	48,581
West Virginia.....	1,233	28	3,238	13,525	2,554	5,033	10,171	50,212	30,260	4,518	58,855	26,135	3,791	45,742
Boone.....	25	1	156	769	148	285	712	1,795	996	160	1,913	1,038	56	1,122
Braxton.....	18	-	46	166	31	59	86	352	238	96	548	138	(NA)	(NA)
Cabell.....	31	1	69	291	66	141	267	535	788	73	760	636	(NA)	(NA)
Calhoun.....	146	1	228	538	164	347	430	1,896	1,383	342	2,671	950	227	1,912
Clay.....	28	-	51	204	43	77	154	888	459	69	1,038	378	(NA)	(NA)
Doddridge.....	69	-	108	387	79	156	279	2,182	3,427	411	3,150	2,870	(NA)	(NA)
Gilmer.....	51	2	133	517	116	251	444	1,770	713	132	2,065	550	(NA)	(NA)
Harrison.....	41	2	178	859	158	313	761	1,844	924	46	2,540	274	(NA)	(NA)
Jackson.....	29	-	47	178	39	79	146	603	202	13	587	231	(NA)	(NA)
Kanawha.....	53	3	253	1,252	209	404	957	5,830	2,308	535	5,879	2,794	293	3,786

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1963 and 1958—Continued

Division, State, county, and district	1963											1958		
	County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees on March 15	Value of shipments and receipts
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)		
South Atlantic—Continued														
West Virginia—Continued														
Lewis.....	43	1	109	544	92	200	445	2,631	970	218	2,780	1,039	107	2,148
Lincoln.....	46	2	154	706	121	231	507	2,851	1,139	293	3,993	290	196	3,822
Logan.....	20	-	40	194	32	60	133	1,461	516	69	1,775	271	127	3,153
McDowell.....	4	-	7	35	5	7	17	1,028	557	63	784	864	(NA)	(NA)
Marion.....	21	1	99	508	82	166	424	424	281	17	609	113	(NA)	(NA)
Mingo.....	26	-	56	210	45	75	140	1,619	720	141	2,198	282	78	2,639
Pleasants.....	36	-	20	65	16	31	46	958	1,405	132	1,120	1,375	(NA)	(NA)
Preston.....	5	-	18	118	17	36	111	521	1,077	86	653	1,031	(NA)	(NA)
Putnam.....	14	1	60	249	63	111	234	851	260	12	626	497	136	1,471
Ritchie.....	138	2	187	533	168	344	438	1,734	2,253	284	2,692	1,579	306	1,325
Roane.....	71	2	174	604	155	297	507	2,065	1,112	134	2,352	959	133	1,476
Tyler.....	37	1	69	282	52	95	198	1,938	263	21	1,992	230	(NA)	(NA)
Upshur.....	20	-	36	185	32	64	162	815	881	26	1,062	660	(NA)	(NA)
Wayne.....	33	2	123	533	101	200	411	2,037	1,309	321	2,712	955	130	2,109
Wetzel.....	28	2	118	540	102	196	462	704	254	68	970	56	(NA)	(NA)
Wood.....	58	2	142	617	68	134	259	1,389	2,223	198	1,817	1,993	(NA)	(NA)
Wyoming.....	11	1	43	221	34	58	129	2,270	336	52	2,371	287	126	2,112
Undistributed by county.	31	1	319	1,582	138	255	625	4,819	693	95	4,557	1,050	231	3,927
Florida.....	14	1	149	1,099	22	42	123	587	1,207	50	1,356	488	(NA)	(NA)
East South Central.....	1,347	54	4,592	26,514	3,133	6,095	15,621	237,310	83,267	12,121	281,517	51,181	5,407	210,267
Kentucky.....	790	32	2,566	11,267	2,111	3,930	8,851	58,780	19,870	4,834	69,283	14,201	3,097	61,814
Butler.....	15	-	32	112	29	44	89	614	212	16	726	116	(NA)	(NA)
Christian.....	15	1	50	200	41	78	169	748	360	50	993	165	45	1,163
Daviess.....	84	2	234	868	184	321	631	5,251	1,572	130	6,285	668	290	3,593
Hancock.....	15	-	30	103	27	47	89	579	223	13	737	78	(NA)	(NA)
Henderson.....	75	1	191	878	167	301	705	9,863	2,059	585	11,387	1,120	180	8,351
Hopkins.....	30	1	59	266	56	104	244	1,438	2,839	1,143	4,458	962	(NA)	(NA)
Johnson.....	14	2	69	309	66	124	293	1,055	494	147	1,384	312	(NA)	(NA)
Knott.....	13	2	114	592	104	197	489	830	158	32	896	124	89	2,038
Lawrence.....	16	2	106	539	93	176	416	577	217	75	656	213	(NA)	(NA)
Lee.....	19	2	101	472	580	103	229	4,136	923	280	4,611	728	170	2,032
McLean.....	39	-	71	269	58	109	212	1,814	631	77	2,158	364	116	1,942
Magoffin.....	11	3	136	531	106	160	377	2,348	567	188	2,550	553	158	4,142
Martin.....	16	1	100	498	81	148	363	736	102	61	887	12	109	2,045
Metcalfe.....	15	-	6	36	5	9	30	449	147	22	505	113	(NA)	(NA)
Muhlenberg.....	43	-	51	181	42	80	148	926	699	344	1,294	675	80	1,651
Ohio.....	49	-	108	377	80	146	304	1,338	933	55	2,115	211	156	2,518
Pike.....	15	3	159	792	123	234	560	4,550	909	371	3,346	2,484	194	5,932
Union.....	27	2	94	521	83	151	452	3,510	1,240	223	4,402	571	105	4,431
Webster.....	31	1	70	290	60	113	228	3,095	841	285	3,721	500	122	2,807
Undistributed by county.	30	1	112	378	91	170	306	1,332	519	98	1,669	280	507	8,833
Alabama.....	42	1	132	857	80	205	462	15,567	8,973	318	20,404	4,454	222	16,417
Choctaw.....	7	-	3	19	2	4	10	269	512	13	505	289	(NA)	(NA)
Escambia.....	4	-	7	46	7	14	46	1,023	247	36	1,251	55	(NA)	(NA)
Mobile.....	16	1	88	599	45	129	219	14,149	6,702	264	18,140	2,975	120	13,033
Mississippi.....	501	21	1,886	14,352	939	1,954	6,286	162,838	54,235	6,968	191,529	32,512	2,081	131,909
Adams.....	52	1	164	1,140	94	194	571	16,432	6,297	530	21,275	1,984	239	14,672
Amite.....	14	-	21	129	5	9	25	2,452	1,539	114	3,013	1,092	(NA)	(NA)
Clarke.....	15	-	36	224	34	66	208	139	1,148	449	1,337	399	(NA)	(NA)
Forrest.....	17	1	203	1,625	77	155	546	6,460	1,385	132	7,364	613	151	6,517
Franklin.....	19	-	10	49	9	17	35	2,146	1,231	95	2,832	640	26	3,315
Hinds.....	48	10	631	5,200	85	177	575	5,813	1,462	97	6,951	421	(NA)	(NA)
Jasper.....	28	-	29	178	16	31	79	12,150	1,260	105	13,123	392	130	14,005
Jefferson.....	20	1	60	495	48	98	387	3,193	683	32	3,708	200	47	9,345
Jones.....	27	2	87	598	43	90	240	13,151	4,749	959	15,953	2,906	141	10,459
Lamar.....	14	-	46	327	31	59	186	12,977	1,627	215	14,211	608	25	5,665
Lincoln.....	11	1	100	784	45	86	306	5,211	2,430	232	6,603	1,270	128	9,434
Madison.....	7	-	3	6	3	4	6	1,248	368	47	1,582	81	(NA)	(NA)
Marion.....	14	-	24	186	9	15	53	6,447	1,665	248	6,441	1,919	25	1,762
Monroe.....	6	-	2	14	1	2	5	834	252	25	921	190	(NA)	(NA)
Pearl River.....	13	1	32	221	12	28	97	1,975	1,330	103	2,924	484	34	2,494
Pike.....	9	2	61	501	45	94	317	31,449	3,761	279	34,474	1,015	6	1,050
Simpson.....	16	-	34	281	26	61	202	1,808	2,524	167	3,342	1,157	(NA)	(NA)
Smith.....	16	-	5	34	2	4	16	8,318	3,547	426	7,429	4,862	46	4,727
Walthall.....	20	1	51	288	46	121	218	6,055	1,479	533	6,278	1,789	(NA)	(NA)

See footnotes at end of table.



TABLE 2B. General Statistics for the Industry, by County: 1963 and 1958—Continued

Division, State, county, and district	1963												1958	
	County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees on March 15	Value of shipments and receipts
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
East South Central—Con.														
Mississippi—Continued														
Wayne.....	29	-	30	203	17	35	87	6,549	3,283	230	8,259	1,803	171	11,615
Wilkinson.....	9	-	5	36	4	6	30	1,089	592	121	1,012	790	53	2,228
Yazoo.....	21	1	68	385	40	78	208	7,280	2,601	236	8,181	1,936	42	10,083
Undistributed by county.	18	-	32	170	23	37	134	417	1,007	134	1,238	320	31	7,964
West South Central, total...	17,036	737	91,004	664,351	47,283	95,115	286,077	6,060,004	1,775,949	275,570	6,585,864	1,525,659	111,908	5,302,044
Arkansas.....	366	16	1,207	6,688	891	1,878	4,571	58,488	19,550	3,319	68,982	12,375	1,908	81,986
Columbia.....	40	4	257	1,738	151	303	913	10,552	1,553	302	11,741	666	333	20,413
Crawford.....	6	1	50	325	15	38	90	2,384	698	57	2,142	997	(NA)	(NA)
Franklin.....	8	1	64	360	52	124	279	3,416	2,382	313	4,670	1,441	64	4,942
Johnson.....	6	1	33	196	28	69	163	2,278	570	78	2,475	451	(NA)	(NA)
Lafayette.....	28	-	33	167	30	62	148	8,801	1,946	378	10,521	604	71	12,919
Logan.....	5	-	3	23	2	3	8	141	725	57	390	533	(NA)	(NA)
Miller.....	28	1	49	178	37	82	133	7,495	1,161	237	6,983	1,910	58	5,297
Nevada.....	16	1	36	152	36	66	152	1,737	380	75	1,909	283	46	1,672
Quachita.....	61	2	167	843	135	279	684	7,150	2,542	319	8,874	1,137	291	16,053
Sebastian.....	6	-	26	165	15	38	90	686	645	302	796	837	(NA)	(NA)
Union.....	112	5	416	2,112	286	608	1,515	11,194	4,300	535	13,963	2,066	730	19,238
Undistributed by county.	7	-	16	71	10	14	33	557	82	-	634	5	220	-
Louisiana, total.....	1,798	157	17,061	131,823	10,603	22,207	72,978	2,107,158	667,118	91,748	2,236,901	629,123	20,537	1,321,899
North Louisiana.....	810	42	3,089	19,045	2,135	4,441	11,600	208,899	58,764	10,246	228,692	49,217	(NA)	(NA)
Bienville.....	28	-	34	222	25	51	148	6,333	1,199	138	6,778	892	32	5,544
Bossier.....	48	2	130	844	113	257	566	23,199	5,219	1,055	25,911	3,562	239	22,028
Caddo.....	214	17	1,382	8,700	752	1,574	3,969	40,659	16,349	2,813	45,818	14,003	2,558	27,694
Caldwell.....	5	-	5	35	3	7	22	2,048	560	79	1,574	1,113	(NA)	(NA)
Catahoula.....	33	-	23	134	16	33	98	4,351	1,547	338	5,257	979	14	1,939
Cladborne.....	55	3	225	1,411	157	371	858	17,549	3,941	707	19,492	2,705	335	16,484
Concordia.....	39	2	135	965	110	233	743	9,895	3,052	543	12,053	1,437	111	14,712
De Soto.....	44	3	113	728	95	207	559	8,254	1,806	521	9,629	952	111	8,365
Franklin.....	8	-	3	20	3	5	20	1,285	55	37	1,335	42	32	1,311
Jackson.....	6	-	8	62	8	15	62	1,582	474	80	550	1,586	(NA)	(NA)
La Salle.....	35	4	306	1,777	207	409	1,157	13,677	2,405	203	14,428	1,857	265	13,736
Lincoln.....	27	1	43	315	29	56	201	7,288	2,458	465	7,597	2,614	107	9,387
Morehouse.....	6	-	20	98	17	36	80	1,372	186	45	1,275	328	(NA)	(NA)
Quachita.....	33	2	110	601	69	134	334	9,258	2,769	430	9,542	2,915	219	9,256
Richland.....	13	1	56	370	55	111	351	14,497	531	273	14,758	543	(NA)	(NA)
Sabine.....	67	1	144	639	127	241	493	8,136	5,568	986	9,583	5,107	(NA)	(NA)
Tensas.....	28	-	55	364	34	71	217	12,820	4,829	914	13,621	4,942	50	8,189
Union.....	25	3	138	683	112	203	508	9,293	1,587	134	9,129	1,885	107	8,526
Webster.....	50	3	150	916	111	239	648	14,753	2,501	552	16,011	1,795	110	16,122
Winn.....	18	-	20	79	15	31	56	1,472	725	93	2,154	136	(NA)	(NA)
South Louisiana.....	947	112	13,972	112,778	8,468	17,766	61,378	1,898,259	608,354	81,502	2,008,209	579,906	(NA)	(NA)
Acadia.....	75	2	244	1,621	207	385	1,318	48,873	13,210	1,531	57,312	6,302	436	40,554
Allen.....	15	-	33	230	31	61	214	6,228	1,428	117	7,567	206	41	5,766
Assumption.....	24	-	28	209	24	52	177	16,772	4,923	894	20,903	1,686	65	11,183
Avoyelles.....	8	-	11	85	7	15	53	2,573	675	79	2,072	1,255	27	2,031
Beauregard.....	31	2	224	1,512	43	91	283	8,687	2,502	217	10,204	1,202	103	13,794
Calcasieu.....	64	5	395	2,881	293	547	1,849	18,679	8,454	995	21,602	6,526	939	28,625
Cameron.....	57	3	303	2,288	262	574	1,908	93,131	31,950	4,050	101,916	27,215	366	64,942
East Baton Rouge.....	10	-	31	218	23	46	144	2,480	576	52	2,886	222	135	4,276
Evangeline.....	16	1	41	287	39	75	272	7,817	1,381	265	8,285	1,178	37	6,294
Iberia.....	19	2	288	2,219	210	444	1,533	52,001	15,189	1,946	58,742	10,394	620	44,888
Iberville.....	27	2	119	867	81	176	573	25,331	6,396	840	25,228	7,339	218	19,841
Jefferson.....	27	6	1,074	8,497	684	1,480	5,109	41,226	11,019	1,001	44,607	8,639	891	27,285
Jefferson Davis.....	27	1	169	1,274	161	341	1,170	41,308	9,232	1,177	46,598	5,119	1,933	25,573
Lafayette.....	52	17	1,369	11,397	557	1,173	4,171	17,038	3,028	386	17,473	3,279	937	2,253
Lafourche.....	56	7	698	5,580	441	914	3,208	139,401	46,284	6,249	153,966	37,968	1,445	114,570
Plaquemines.....	35	9	1,473	11,194	929	1,966	6,638	218,805	74,354	9,856	244,940	58,075	1,932	226,893
Pointe Coupee.....	11	1	43	308	30	59	185	4,749	1,400	69	5,662	556	(NA)	(NA)
Rapides.....	13	-	8	31	7	9	23	702	416	12	732	398	9	1,260
St. Bernard.....	15	1	58	386	49	129	314	3,718	1,609	381	2,244	3,464	(NA)	(NA)
St. James.....	7	-	23	175	16	37	114	4,263	1,378	146	4,220	1,567	50	4,309
St. John the Baptist.....	5	-	9	55	8	24	47	2,722	810	40	2,992	580	(NA)	(NA)
St. Landry.....	41	2	138	1,099	113	229	836	21,224	7,942	1,123	27,243	3,046	265	24,690

See footnotes at end of table.



TABLE 2B. General Statistics for the Industry, by County: 1963 and 1958—Continued

Division, State, county, and district	1963												1958	
	County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expendi- tures	All employees on March 15	Value of shipments and receipts
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man- hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)		
West South Central—Con.														
Louisiana—Continued														
South Louisiana—Con.														
St. Martin.....	41	2	158	1,140	109	233	728	56,936	16,103	2,332	61,222	14,149	324	37,169
St. Mary.....	30	9	782	6,246	560	1,194	4,250	109,546	31,810	3,245	123,451	21,150	653	51,775
Terrebonne.....	44	6	1,271	9,654	1,003	2,113	7,261	230,674	64,971	6,500	243,633	58,512	1,426	110,689
Vermilion.....	56	5	363	2,870	257	543	1,948	69,072	19,667	2,571	74,344	16,966	238	41,051
West Baton Rouge.....	6	-	5	17	3	3	11	882	268	48	1,098	100	(NA)	(NA)
Offshore.....	28	9	1,220	9,828	979	2,130	7,627	592,609	209,598	32,983	569,928	265,262	1,455	116,964
Undistributed by county <sup>2</sup> .....	41	3	214	1,072	155	207	682	7,806	4,081	781	9,887	2,781	223	80,116
Oklahoma.....	4,067	140	18,625	126,772	9,822	18,334	51,580	627,365	213,524	40,674	705,537	176,026	22,791	606,756
Alfalfa.....	33	1	35	245	32	60	227	2,358	1,291	366	3,154	861	30	1,737
Beaver.....	72	-	145	943	93	181	571	26,443	10,451	1,888	29,995	8,787	55	7,345
Blaine.....	14	-	7	49	5	9	26	3,168	1,474	260	1,630	3,272	(NA)	(NA)
Bryan.....	13	-	2	17	2	4	17	2,321	766	183	2,443	827	(NA)	(NA)
Caddo.....	61	2	200	1,147	150	318	846	8,582	2,590	485	10,353	1,304	276	13,947
Carter.....	171	11	1,158	7,551	706	1,398	4,135	35,670	13,727	2,841	39,050	13,188	1,362	49,083
Cimarron.....	21	-	13	67	12	22	53	3,228	801	92	2,611	1,510	40	1,418
Cleveland.....	64	-	87	527	75	143	438	7,810	4,032	708	9,473	3,077	175	13,663
Coal.....	25	-	22	157	16	26	93	2,323	641	123	2,687	400	10	1,355
Cotton.....	36	-	63	326	50	84	210	4,133	981	227	4,387	954	71	3,513
Creek.....	199	7	755	3,764	560	1,024	2,420	24,151	7,978	1,460	28,878	4,711	1,025	24,437
Custer.....	11	-	3	18	3	5	18	2,020	594	86	1,186	1,514	(NA)	(NA)
Dewey.....	19	-	8	51	8	13	51	6,977	3,046	659	4,897	5,785	(NA)	(NA)
Ellis.....	17	1	22	209	11	23	76	1,120	692	91	640	1,263	(NA)	(NA)
Garfield.....	75	4	213	1,408	137	238	696	13,718	5,869	1,634	8,959	12,262	202	4,375
Garvin.....	123	4	434	2,838	319	614	1,854	51,640	14,973	2,711	61,789	7,535	949	69,202
Grady.....	58	2	188	1,280	139	268	845	13,603	3,822	787	14,176	4,036	277	17,295
Grant.....	63	-	94	530	71	141	366	3,040	1,942	262	4,072	1,172	78	2,932
Harper.....	45	-	40	237	33	53	174	8,687	4,009	734	11,857	1,573	26	1,146
Haskell.....	12	-	7	29	6	11	18	1,309	287	107	678	1,025	(NA)	(NA)
Hughes.....	98	-	146	786	134	256	703	5,323	1,979	535	6,311	1,526	201	6,832
Jackson.....	15	-	12	35	11	19	26	895	231	12	991	147	(NA)	(NA)
Jefferson.....	47	-	63	246	52	97	198	2,969	963	185	3,357	760	58	3,611
Kingfisher.....	68	2	216	1,529	169	330	1,170	23,619	12,195	2,604	29,407	9,011	(NA)	(NA)
Le Flore.....	11	-	18	90	18	40	90	1,138	1,091	61	1,128	1,162	(NA)	(NA)
Lincoln.....	134	1	318	1,603	243	456	1,179	15,546	5,113	704	19,101	2,262	403	13,930
Logan.....	82	-	95	469	82	135	346	4,475	2,108	324	4,824	2,083	193	8,072
Love.....	28	-	35	263	22	43	103	4,866	2,809	444	6,882	1,237	15	1,808
McClain.....	62	2	107	572	96	158	458	14,368	5,939	1,305	18,175	3,437	234	13,390
Major.....	37	1	42	340	29	63	156	11,816	3,718	590	10,504	5,620	33	1,634
Marshall.....	24	-	36	234	25	49	142	4,657	1,723	300	5,189	1,491	132	6,446
Murray.....	16	-	34	205	32	60	188	1,362	570	170	1,320	782	(NA)	(NA)
Muskogee.....	41	-	94	362	80	152	282	4,447	1,047	336	4,534	1,296	43	498
Noble.....	80	-	106	589	87	160	429	5,009	1,989	335	6,319	1,014	166	8,980
Nowata.....	51	2	231	1,290	175	355	892	3,692	1,611	421	5,356	368	512	11,081
Oklfuskee.....	113	-	200	909	159	295	714	5,953	2,378	657	7,419	1,569	207	8,324
Oklahoma.....	171	28	2,641	21,264	1,043	2,147	6,921	32,230	6,936	1,371	35,591	4,946	2,995	26,095
Oklmulgee.....	120	1	223	815	182	353	648	3,975	947	224	3,997	1,249	327	4,841
Osage.....	223	9	1,022	5,483	792	1,537	3,955	49,897	13,583	1,923	57,507	7,896	1,429	61,459
Pawnee.....	70	-	115	455	94	155	341	3,222	1,176	367	3,662	1,103	166	5,459
Payne.....	91	1	192	864	153	282	657	4,717	2,018	362	6,252	845	252	12,812
Pontotoc.....	108	1	259	1,216	207	402	897	7,393	2,541	561	8,562	1,933	386	7,902
Pottawatomie.....	135	2	203	901	171	300	703	6,586	3,159	680	8,744	1,681	316	9,497
Rogers.....	30	1	89	322	72	155	256	665	739	287	1,579	112	263	6,171
Seminole.....	187	4	545	2,773	402	751	1,868	16,877	5,755	1,281	21,300	2,613	818	21,607
Stephens.....	166	6	620	3,444	492	964	2,486	47,814	12,839	2,751	57,730	5,674	1,075	65,413
Texas.....	42	3	154	1,042	129	274	862	30,097	7,416	1,094	26,525	12,082	130	13,714
Tillman.....	13	-	26	168	22	53	150	740	178	24	872	70	47	1,772
Tulsa.....	221	27	4,956	42,174	942	1,761	5,524	8,103	4,382	464	9,674	3,275	5,622	4,320
Washington.....	110	5	1,474	10,401	264	558	1,001	9,671	3,032	569	11,354	1,918	411	10,666
Washita.....	11	-	4	18	2	5	9	1,963	554	61	1,419	1,159	(NA)	(NA)
Woods.....	21	-	9	42	7	11	25	1,737	763	137	1,541	1,096	(NA)	(NA)
Woodward.....	26	2	195	1,679	138	307	1,165	16,824	8,199	2,447	18,370	9,100	(NA)	(NA)
Undistributed by county.....	65	7	546	2,223	454	403	1,339	28,325	3,954	52	29,643	2,688	1,190	25,799

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1963 and 1958—Continued

Division, State, county, and district	1963												1958	
	County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Selected expenses			Value of shipments and receipts	Capital expendi- tures	All employees on March 15	Value of shipments and receipts
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man- hours	Wages	Value added in mining	Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
West South Central—Con.														
Texas.....	10,804	424	54,111	399,068	25,967	52,336	156,948	3,266,993	875,757	139,829	3,574,444	708,135	66,672	3,291,403
Texas Gulf Coast A.....	1,071	83	14,770	128,927	4,238	8,693	29,291	548,556	135,841	20,570	607,259	97,708	(NA)	(NA)
Austin.....	14	-	25	162	6	10	32	5,449	1,454	345	6,970	278	65	4,897
Brazoria.....	69	4	544	4,355	379	743	3,039	97,486	20,636	2,451	109,756	10,817	693	93,525
Chambers.....	49	2	309	2,360	229	499	1,591	59,085	15,523	3,407	65,333	12,682	334	50,692
Colorado.....	47	2	118	938	51	110	358	9,628	3,754	287	10,606	3,063	81	10,110
Fayette.....	7	-	16	106	16	32	106	903	104	9	869	147	(NA)	(NA)
Fort Bend.....	50	1	260	1,912	143	288	922	20,382	5,361	885	24,983	1,645	281	26,212
Galveston.....	35	1	174	1,122	150	336	760	51,752	12,030	1,229	56,194	8,817	214	28,469
Hardin.....	56	1	186	1,057	129	249	707	18,557	4,313	1,260	21,684	2,446	360	23,942
Harris.....	212	46	10,001	90,074	1,359	2,795	9,344	53,715	12,553	2,822	61,378	7,712	10,522	73,293
Jasper.....	14	1	30	91	9	9	28	3,070	626	103	3,050	749	8	1,609
Jefferson.....	68	6	1,277	10,868	437	890	3,324	50,847	9,342	1,130	54,899	6,420	1,169	29,584
Liberty.....	78	6	398	2,836	251	513	1,548	29,952	8,356	1,169	34,909	4,568	600	44,047
Madison.....	12	-	15	84	4	8	20	3,030	2,179	369	2,194	3,384	(NA)	(NA)
Matagorda.....	67	4	324	2,419	229	474	1,657	52,640	14,022	1,933	57,220	11,375	254	22,994
Montgomery.....	52	4	318	2,327	249	524	1,775	20,609	5,289	1,115	25,410	1,603	425	23,255
Newton.....	22	-	13	83	7	15	41	7,603	1,723	181	7,362	2,145	7	4,872
Orange.....	32	2	123	825	78	136	395	7,676	2,214	146	8,416	1,620	355	11,561
Polk.....	30	-	59	344	31	64	152	3,627	993	119	4,442	297	76	4,362
San Jacinto.....	15	-	14	81	12	24	59	1,772	649	37	2,233	225	12	1,804
Tyler.....	10	-	3	27	2	5	21	3,427	862	192	4,216	265	26	2,300
Wharton.....	82	2	257	1,609	165	308	886	25,720	5,725	891	25,152	7,184	302	22,995
Offshore.....	15	1	56	390	24	34	118	6,372	1,797	990	7,209	1,950	634	63,626
Texas Gulf Coast B.....	727	16	1,608	10,624	1,191	2,427	7,553	233,156	51,598	5,900	251,476	39,178	(NA)	(NA)
Araucaria.....	34	-	73	494	63	140	428	12,050	2,573	243	11,261	3,605	79	10,456
Bee.....	79	1	135	750	122	237	667	11,393	3,647	517	11,780	3,777	421	9,836
Calhoun.....	49	-	88	593	68	146	443	20,276	5,412	504	22,404	3,788	190	12,228
De Witt.....	58	-	54	295	43	76	236	12,750	1,826	372	10,804	4,144	74	8,592
Goliad.....	81	-	79	489	75	154	455	9,526	3,144	516	10,945	2,241	159	12,563
Jackson.....	102	4	207	1,275	181	342	1,056	43,740	8,862	958	48,883	4,677	667	38,034
Karnes.....	51	-	29	171	16	34	93	15,171	3,418	392	13,860	5,121	40	6,681
Lavaca.....	36	-	23	105	19	30	87	4,391	2,091	77	5,573	986	78	7,766
Live Oak.....	72	1	132	728	97	183	548	17,764	5,068	613	18,861	4,584	103	13,116
Refugio.....	78	6	383	2,951	283	625	2,090	66,977	10,307	1,172	72,786	5,670	341	55,940
Victoria.....	85	4	344	2,343	210	435	1,308	23,306	6,478	566	26,723	3,627	289	23,565
South Texas.....	787	38	3,934	29,061	2,256	4,530	14,561	342,667	94,793	10,695	360,235	87,920	(NA)	(NA)
Brooks.....	25	-	53	370	44	75	277	24,276	10,565	771	30,399	5,213	151	23,076
Cameron.....	10	-	10	66	10	21	66	1,573	459	34	959	1,107	(NA)	(NA)
Duval.....	127	4	360	2,033	320	620	1,740	32,448	7,005	844	27,037	13,260	616	32,283
Hidalgo.....	65	3	195	1,525	105	217	761	37,037	8,117	906	37,644	8,416	269	19,510
Jim Hogg.....	35	-	48	249	35	70	149	12,006	1,974	383	12,483	1,880	181	5,570
Jim Wells.....	81	2	245	1,518	198	356	1,192	57,648	13,448	1,559	71,571	1,084	479	49,543
Kenedy.....	10	-	21	167	15	29	108	7,323	2,576	204	7,489	2,614	(NA)	(NA)
Kleberg.....	22	1	314	2,681	178	370	1,418	43,847	18,169	1,176	35,819	27,373	214	18,235
Nueces.....	127	20	1,981	16,246	752	1,549	5,147	51,256	13,999	1,528	56,200	10,583	1,736	53,592
San Patricio.....	107	4	282	1,785	216	436	1,329	33,048	7,369	1,105	36,436	5,086	462	35,889
Starr.....	65	2	204	1,367	178	350	1,133	20,798	3,004	519	22,184	2,137	198	20,373
Willacy.....	12	-	22	167	17	34	116	5,965	1,913	93	6,496	1,475	28	5,830
Zapata.....	41	1	95	495	66	134	340	5,996	2,051	283	5,094	3,236	68	2,060
Southwest Texas.....	456	13	1,270	7,810	777	1,543	4,259	64,189	18,223	1,531	72,023	11,920	(NA)	(NA)
Atascosa.....	47	2	272	1,897	211	425	1,355	14,081	3,553	152	15,617	2,169	285	12,326
Bexar.....	81	5	365	2,579	82	160	304	6,156	2,003	155	7,674	640	(NA)	(NA)
Caldwell.....	66	2	174	832	142	280	642	7,829	2,860	510	9,017	2,182	241	10,557
Dimmit.....	12	-	13	93	11	23	77	1,195	245	8	704	744	31	1,556
Frio.....	30	1	72	375	59	121	310	4,459	770	101	4,066	1,264	78	5,937
Gonzales.....	9	-	4	11	3	6	7	485	227	17	445	284	(NA)	(NA)
Guadalupe.....	34	1	89	480	77	140	410	6,941	2,379	141	8,801	660	193	12,252
La Salle.....	15	-	23	145	12	24	76	602	703	9	925	389	(NA)	(NA)
McMullen.....	46	-	56	331	44	84	231	8,991	2,428	251	10,720	950	(NA)	(NA)
Maverick.....	8	1	25	189	23	46	172	2,991	298	82	2,027	1,344	(NA)	(NA)
Travis.....	9	-	10	50	4	7	12	1,483	376	43	1,660	242	(NA)	(NA)
Val Verde.....	6	-	1	14	1	2	14	680	120	7	759	48	(NA)	(NA)
Willson.....	31	-	20	104	14	21	50	887	309	92	992	296	(NA)	(NA)
Zavala.....	8	-	8	41	6	8	39	933	150	3	901	185	(NA)	(NA)

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1963 and 1958—Continued

Division, State, county, and district	1963												1958	
	County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees on March 15	Value of shipments and receipts
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
								(number)			(number)	(number)	(\$1,000)	(number)
West South Central—Con. Texas—Continued														
North Central Texas A...	1,473	26	3,883	20,571	2,792	5,698	13,282	177,939	59,709	10,697	200,975	47,370	(NA)	(NA)
Archer.....	210	1	447	1,994	366	725	1,510	17,820	4,363	855	18,899	4,139	661	24,227
Baylor.....	60	-	91	360	68	141	239	3,131	924	198	3,651	602	107	7,156
Clay.....	80	-	155	806	132	275	627	9,542	2,202	328	9,886	2,186	279	16,250
Cooke.....	113	4	374	2,083	311	637	1,560	23,888	5,920	1,511	25,171	6,148	425	22,427
Denton.....	10	-	5	22	5	11	22	341	120	14	437	38	(NA)	(NA)
Foard.....	14	-	13	84	10	24	65	1,640	824	142	2,096	510	19	1,654
Hardeman.....	20	-	8	26	7	14	19	4,979	2,296	230	4,198	3,307	(NA)	(NA)
Jack.....	121	1	272	1,518	207	417	994	10,246	4,018	920	12,050	3,134	321	13,349
Knox.....	62	-	79	332	70	123	262	4,167	1,164	227	5,019	539	96	5,699
Montague.....	92	1	225	1,379	208	419	1,237	13,349	6,078	1,251	16,754	3,924	333	15,471
Wichita.....	317	13	1,267	7,078	716	1,487	3,426	42,146	13,119	2,252	48,177	9,340	1,380	29,384
Wilbarger.....	80	2	201	957	174	370	807	12,267	3,793	645	14,527	2,178	341	15,208
Wise.....	89	1	159	1,154	96	180	495	17,935	7,134	655	19,434	6,290	220	12,664
Young.....	205	3	504	2,093	338	650	1,229	12,063	4,440	888	14,554	2,837	605	18,497
North Central Texas B...	1,202	14	2,429	13,148	1,874	3,593	9,232	120,297	33,761	5,753	130,325	29,486	(NA)	(NA)
Brown.....	46	-	35	93	31	58	80	465	332	50	736	111	(NA)	(NA)
Callahan.....	81	1	152	661	138	255	557	3,919	2,355	352	5,542	1,084	127	6,020
Coleman.....	102	-	126	613	104	202	478	5,063	2,123	363	6,591	958	191	8,182
Comanche.....	14	-	11	37	9	20	30	321	173	12	426	80	(NA)	(NA)
Eastland.....	56	2	142	648	132	281	569	3,569	1,092	195	3,046	1,810	164	2,769
Fisher.....	62	1	103	680	87	160	518	13,883	2,037	533	13,035	3,418	185	14,121
Haskell.....	70	1	128	680	106	199	551	11,059	2,516	353	11,654	2,274	137	10,753
Jones.....	119	-	233	1,068	179	333	824	11,814	3,418	603	13,881	1,954	369	15,053
Nolan.....	62	1	112	684	95	202	551	12,806	3,703	679	14,579	2,609	205	21,776
Palo Pinto.....	33	-	23	86	18	23	63	2,094	592	85	1,592	1,179	(NA)	(NA)
Parker.....	12	-	14	90	13	26	76	1,384	226	8	1,007	611	18	1,987
Shackelford.....	118	3	249	1,096	207	357	906	9,010	2,837	465	9,918	2,394	327	7,808
Stephens.....	90	-	159	575	122	213	452	6,432	2,046	452	6,052	2,878	269	9,790
Stonewall.....	60	1	204	1,125	147	284	848	15,248	2,786	442	15,077	3,399	177	19,987
Taylor.....	159	4	659	4,424	349	644	1,871	19,488	5,297	667	21,663	3,789	509	11,474
Throckmorton.....	101	-	120	471	106	189	414	6,053	2,181	374	6,509	2,099	210	12,873
East Texas A.....	440	35	5,520	44,998	836	1,619	4,375	92,005	26,242	3,384	91,087	30,544	(NA)	(NA)
Dallas.....	104	23	3,952	34,400	97	190	430	10,171	2,176	94	11,310	1,131	(NA)	(NA)
Ellis.....	12	-	33	161	27	55	126	534	158	1	550	143	(NA)	(NA)
Freestone.....	31	-	31	128	24	39	88	3,425	1,398	203	3,578	1,448	15	1,767
Grayson.....	56	2	168	975	125	251	682	21,660	7,915	882	24,439	6,018	185	20,611
Henderson.....	35	2	220	1,676	160	331	1,258	14,573	3,150	271	14,642	3,352	125	2,280
Hopkins.....	16	-	14	81	12	24	65	2,715	898	279	3,122	770	72	3,634
Kaufman.....	5	-	4	23	3	5	12	1,393	355	99	1,346	501	13	2,022
Leon.....	32	-	25	117	21	16	94	3,539	3,365	658	5,432	2,130	5	1,695
Limestone.....	26	1	48	229	39	82	182	756	905	79	1,453	287	55	1,037
Navarro.....	33	-	85	330	58	95	187	2,178	1,150	164	2,715	777	196	4,235
Tarrant.....	37	6	827	6,871	31	62	199	2,967	768	18	3,496	257	(NA)	(NA)
Van Zandt.....	23	1	146	926	125	255	803	13,584	1,962	247	14,539	1,254	206	17,518
East Texas B.....	1,012	39	4,133	25,752	2,905	5,841	16,379	295,173	50,608	10,450	321,859	34,372	(NA)	(NA)
Anderson.....	86	3	174	989	141	279	797	250,274	44,578	8,493	273,078	30,267	146	17,468
Camp.....	11	-	5	21	4	8	15	969	322	76	830	537	(NA)	(NA)
Cass.....	27	-	61	347	43	91	240	4,872	674	142	4,841	847	109	6,518
Cherokee.....	23	-	20	98	14	20	65	4,971	968	186	5,594	531	47	5,129
Gregg.....	264	13	1,152	6,559	839	1,676	4,562	79,285	12,264	2,223	88,639	5,133	1,847	93,167
Harrison.....	61	1	116	563	96	190	434	10,320	2,772	691	12,447	1,336	224	13,353
Houston.....	29	-	47	214	42	77	185	5,633	3,301	514	5,907	3,541	54	2,808
Marion.....	44	-	99	464	80	146	341	4,220	1,251	119	4,387	1,203	127	9,674
Panola.....	66	3	260	1,517	195	415	1,052	38,991	6,341	1,578	41,867	5,043	244	38,037
Rusk.....	158	4	553	3,341	420	838	2,420	49,473	7,096	1,350	54,412	3,507	1,114	70,717
Shelby.....	12	-	8	31	8	15	31	1,606	192	50	1,590	258	(NA)	(NA)
Smith.....	61	10	1,091	8,261	573	1,145	3,539	12,016	1,790	364	11,057	3,113	672	6,733
Titus.....	26	2	183	1,243	111	240	671	9,307	1,638	335	9,735	1,545	157	8,585
Upshur.....	30	-	38	194	35	67	169	3,466	977	90	4,109	424	92	8,989
Wood.....	78	2	221	1,174	161	327	826	38,969	5,811	1,269	43,512	2,537	334	46,086
West Texas A.....	2,236	108	12,631	92,745	6,623	13,443	42,609	1,088,931	294,657	51,541	1,202,905	232,224	(NA)	(NA)
Andrews.....	171	9	818	6,102	581	1,172	4,141	169,992	51,411	10,624	200,808	31,219	1,074	180,192
Borden.....	54	-	79	504	54	113	330	18,284	4,822	899	22,097	1,908	115	30,524
Cochran.....	60	-	91	593	75	164	483	15,994	3,841	643	15,241	5,237	194	18,225
Crane.....	120	4	447	3,168	278	547	1,749	90,845	21,163	3,673	97,893	17,788	973	97,051
Culberson.....	15	-	10	82	8	15	58	2,872	921	188	2,031	1,950	(NA)	(NA)

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1963 and 1958—Continued

Division, State, county, and district	1963												1958	
	County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees on March 15	Value of shipments and receipts
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man- hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
West South Central—Con. Texas—Continued														
West Texas A—Continued														
Dawson.....	56	1	83	567	56	120	371	19,078	7,385	1,199	19,601	8,061	86	12,114
Ector.....	173	12	1,310	9,855	571	1,221	3,955	178,201	49,392	9,109	191,005	45,697	2,020	178,071
Gaines.....	110	5	304	2,015	204	402	1,308	71,405	18,814	3,657	74,441	19,435	342	66,123
Garza.....	81	1	127	625	109	219	470	12,297	3,216	842	13,349	3,006	175	13,625
Glasscock.....	40	-	42	292	29	52	169	6,482	1,219	270	6,688	1,283	85	6,628
Hockley.....	58	3	277	1,975	183	366	1,246	35,846	10,210	1,080	39,945	7,191	378	38,870
Howard.....	110	3	298	1,676	237	502	1,327	30,870	7,542	1,936	33,804	6,544	619	39,784
Kent.....	21	1	30	200	29	60	186	12,923	1,212	176	13,595	716	102	20,272
King.....	13	-	11	75	8	18	44	2,102	501	180	2,694	89	23	2,753
Loving.....	50	1	66	371	44	90	206	9,281	2,448	394	10,238	1,885	53	5,708
Lubbock.....	31	2	194	1,506	98	183	680	2,110	721	124	2,371	584	131	2,135
Lynn.....	18	-	11	82	8	17	39	1,142	818	75	1,688	347	(NA)	(NA)
Martin.....	39	1	79	474	40	88	259	9,900	3,032	475	9,739	3,668	19	6,037
Midland.....	232	36	3,849	32,240	1,329	2,629	9,092	73,248	19,883	2,863	75,041	20,953	3,590	42,049
Mitchell.....	64	-	78	413	59	104	296	4,607	1,520	528	5,048	1,607	98	5,778
Motley.....	7	-	4	37	3	4	31	705	178	17	885	15	(NA)	(NA)
Pecos.....	138	5	456	2,930	346	725	2,080	50,689	12,313	1,950	49,231	15,721	528	47,456
Reeves.....	56	2	86	662	64	144	462	10,195	3,513	845	8,081	6,472	76	2,251
Scurry.....	117	4	352	2,417	215	439	1,322	74,685	15,475	1,187	89,104	2,243	684	102,379
Sterling.....	25	-	20	101	13	23	54	1,447	549	284	1,359	921	27	1,636
Terry.....	33	2	211	1,658	152	293	1,095	11,666	2,865	460	13,342	1,649	221	15,591
Ward.....	92	8	524	3,656	359	715	2,352	63,569	16,234	2,499	68,659	13,643	700	55,240
Winkler.....	96	7	594	4,232	435	897	2,865	58,264	15,340	2,865	63,942	12,527	1,002	62,792
Yoakum.....	104	1	190	1,356	152	301	959	48,180	11,189	2,256	50,170	11,455	451	41,051
Undistributed by county <sup>7</sup> .....	160	12	949	4,836	667	1,240	3,024	32,769	9,533	840	38,756	4,386	2,130	93,906
West Texas B.....	553	5	915	5,838	715	1,388	4,281	105,117	47,875	8,194	118,379	42,807	(NA)	(NA)
Coke.....	31	1	83	578	80	156	553	14,428	4,683	1,167	18,456	1,822	8,791	24,190
Concho.....	12	-	14	95	10	22	67	1,250	548	92	1,043	847	(NA)	(NA)
Crockett.....	89	1	160	999	138	280	806	18,698	7,565	1,268	21,086	6,445	273	20,813
Irion.....	28	-	27	200	13	21	62	1,175	549	117	1,352	489	10	1,964
Menard.....	14	-	28	178	4	6	13	565	288	97	683	267	(NA)	(NA)
Reagan.....	76	1	141	1,056	103	189	658	12,903	3,506	1,248	14,300	3,357	294	25,105
Runnels.....	83	-	118	553	90	163	430	7,848	3,784	773	8,837	3,568	278	11,134
Schleicher.....	47	-	43	325	28	50	178	6,601	2,490	549	8,330	1,310	104	7,764
Sutton.....	12	1	44	299	34	73	227	1,923	1,670	146	1,665	2,074	(NA)	(NA)
Terrell.....	9	-	12	77	9	20	56	3,950	2,075	109	3,786	2,348	(NA)	(NA)
Tom Green.....	49	-	62	343	52	88	261	5,260	2,790	495	6,023	2,522	159	6,106
Upton.....	98	1	161	954	143	290	820	29,711	17,262	1,571	31,542	17,002	398	45,365
Texas Panhandle.....	698	36	3,018	19,594	1,760	3,561	11,126	198,963	62,450	11,114	217,921	54,606	(NA)	(NA)
Carson.....	70	2	137	988	120	235	749	18,912	4,112	727	20,932	2,819	321	23,066
Collingsworth.....	15	1	101	552	71	139	383	1,116	797	47	1,733	227	(NA)	(NA)
Gray.....	105	11	640	4,273	514	1,038	3,363	34,288	11,093	2,344	39,863	7,862	886	47,694
Hansford.....	47	1	92	681	58	129	420	13,148	5,255	723	15,355	3,771	237	12,965
Hartley.....	8	-	19	133	6	12	24	829	118	8	950	5	(NA)	(NA)
Hemphill.....	17	1	70	500	48	93	319	2,362	1,112	410	1,384	2,500	(NA)	(NA)
Hutchinson.....	137	9	1,003	5,901	410	844	2,423	36,187	10,236	1,571	41,535	6,459	958	48,707
Lipscomb.....	32	-	43	280	21	43	138	7,328	4,738	796	4,890	7,972	(NA)	(NA)
Moore.....	26	2	109	691	90	187	530	21,310	3,125	604	24,076	963	232	24,123
Ochiltree.....	64	1	152	1,073	109	223	740	28,551	11,969	2,371	27,589	15,302	185	10,833
Roberts.....	28	-	33	209	21	45	130	4,537	2,289	306	5,225	1,907	62	5,163
Sherman.....	23	-	12	87	8	16	54	8,795	2,518	449	11,264	498	18	17,615
Wheeler.....	62	1	118	688	84	169	445	4,831	1,699	314	5,114	1,730	99	4,600
Mountain.....	2,017	140	11,496	85,966	6,610	13,194	44,706	969,292	284,797	60,712	1,062,182	252,619	14,521	951,170
Montana.....	278	18	1,110	7,787	667	1,301	4,230	59,045	29,756	9,608	73,930	24,479	1,599	77,729
Carbon.....	8	-	11	86	8	17	69	6,761	2,177	452	8,698	692	(NA)	(NA)
Dawson.....	9	1	56	436	7	16	50	3,739	1,484	564	4,632	1,155	(NA)	(NA)
Fallon.....	9	2	91	628	74	140	497	22,176	9,010	4,578	21,975	13,789	(NA)	(NA)
Glacier.....	36	4	178	1,157	132	261	807	4,163	2,141	1,018	5,798	1,524	242	6,555
Liberty.....	7	-	6	28	5	10	22	141	773	93	634	373	(NA)	(NA)
Musselshell.....	12	-	31	189	26	49	155	2,329	649	104	2,883	199	34	2,165
Roosevelt.....	13	2	57	407	35	68	213	6,625	1,250	290	6,905	1,260	(NA)	(NA)
Rosebud.....	9	1	35	257	30	59	226	3,546	1,170	218	4,712	222	(NA)	(NA)
Sheridan.....	9	-	15	94	10	22	52	1,177	1,324	86	2,179	408	(NA)	(NA)
Toole.....	63	1	113	553	88	168	430	869	2,154	200	2,254	969	131	2,262
Yellowstone.....	20	7	426	3,339	125	247	884	(4)	2,200	91	652	304	(NA)	(NA)
Undistributed by county.....	4	-	9	60	6	11	40	(4)	488	125	443	101	63	251

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1963 and 1958—Continued

Division, State, county, and district	1963												1958	
	County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees on March 15	Value of shipments and receipts
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
Mountain—Continued														
Wyoming.....	463	35	2,918	23,391	1,775	3,591	13,153	334,324	75,186	19,111	364,782	63,839	3,731	296,191
Albany.....	5	-	9	85	8	16	75	1,519	664	234	2,102	315	(NA)	(NA)
Big Horn.....	29	2	185	1,389	111	217	721	23,958	3,545	490	25,740	2,253	207	29,427
Campbell.....	38	-	71	625	62	136	535	12,237	6,890	1,768	14,136	6,759	7	1,800
Carbon.....	19	1	56	410	35	73	249	7,162	1,066	279	6,789	1,718	(NA)	(NA)
Converse.....	17	1	62	461	54	110	414	10,513	2,532	652	11,418	2,279	104	13,652
Crook.....	26	-	62	489	49	111	382	8,610	3,531	1,361	9,314	4,188	(NA)	(NA)
Fremont.....	32	2	114	889	69	140	533	34,719	6,283	1,444	33,397	9,049	197	38,534
Hot Springs.....	19	2	188	1,547	123	250	994	37,034	7,275	1,173	42,991	2,491	265	30,971
Johnson.....	18	-	45	384	31	65	258	16,047	2,503	783	17,332	2,001	125	19,474
Laramie.....	8	1	16	125	14	28	107	1,181	201	34	1,342	74	18	1,711
Natrona.....	67	17	1,328	11,217	554	1,098	4,065	32,425	6,786	3,056	37,338	4,929	1,203	30,879
Niobrara.....	14	-	67	539	47	94	353	1,701	600	132	2,039	394	80	2,458
Park.....	19	3	199	1,601	129	260	954	81,027	10,060	1,836	87,805	5,118	328	65,888
Sheridan.....	5	-	9	75	3	7	25	840	436	194	1,380	90	(NA)	(NA)
Sublette.....	14	1	99	820	76	178	598	23,494	6,633	995	23,808	7,314	72	6,034
Sweetwater.....	30	3	160	1,162	123	248	911	26,384	7,778	1,830	29,230	6,762	(NA)	(NA)
Washakie.....	18	1	70	578	61	136	499	7,802	2,246	301	8,313	2,036	242	19,015
Weston.....	52	1	116	728	94	208	583	5,609	3,245	2,300	7,333	3,821	160	5,895
Undistributed by county.....	15	-	21	124	12	24	65	(4)	450	137	339	150	452	1,205
Colorado.....	475	30	2,702	22,831	1,108	2,229	8,319	109,921	26,531	5,815	119,650	22,617	3,650	155,256
Adams.....	19	1	52	476	27	52	241	1,235	690	84	1,396	613	43	2,080
Baca.....	9	-	1	7	1	2	7	(4)	1,312	133	797	560	(NA)	(NA)
La Plata.....	26	3	187	1,531	66	139	530	2,155	2,121	138	1,859	2,555	298	3,323
Larimer.....	11	-	16	96	13	26	75	566	401	111	759	319	(NA)	(NA)
Logan.....	52	1	122	915	60	132	431	13,302	3,135	543	15,317	1,663	170	17,876
Mesa.....	11	-	35	287	28	60	224	303	467	29	237	562	(NA)	(NA)
Moffat.....	11	1	50	384	37	70	292	5,101	2,123	214	5,254	2,184	108	4,253
Montezuma.....	10	1	51	472	38	77	327	618	901	49	1,101	467	(NA)	(NA)
Montrose.....	5	-	-	-	-	-	-	806	115	12	369	564	(NA)	(NA)
Morgan.....	40	3	140	1,181	105	218	872	9,290	1,639	167	10,445	651	639	22,806
Rio Blanco.....	25	1	205	1,563	126	231	824	49,074	6,520	3,463	54,868	4,189	244	71,452
Routt.....	10	-	18	162	16	37	148	568	100	15	580	103	(NA)	(NA)
Washington.....	51	1	67	522	52	111	389	8,665	2,764	320	9,789	1,960	151	18,014
Weld.....	25	1	78	436	51	82	203	3,808	726	262	4,049	747	66	6,284
Undistributed by county.....	16	-	58	355	40	63	237	11,309	2,191	107	10,539	3,068	419	4,787
New Mexico.....	638	47	4,215	27,903	2,752	5,465	16,890	376,268	118,592	18,621	401,682	111,799	25,743	347,388
East New Mexico.....	458	36	2,717	19,022	1,824	3,581	11,635	302,511	85,112	12,428	324,620	75,431	(NA)	(NA)
Chaves.....	46	9	514	3,717	139	281	862	8,159	2,773	649	8,640	2,941	472	8,359
Eddy.....	132	7	489	3,028	426	848	2,648	42,764	11,546	1,840	45,333	10,817	404	18,262
Lea.....	229	20	1,548	10,905	1,063	2,077	6,966	225,047	60,105	9,476	241,667	52,961	2,011	266,400
Roosevelt.....	51	-	38	255	13	27	80	7,259	2,004	308	7,780	1,791	27	2,351
Undistributed by county.....	14	-	46	148	41	54	100	2,504	1,427	11	3,241	701	128	5,582
West New Mexico.....	179	11	1,498	8,881	928	1,884	5,255	73,757	33,480	6,193	77,062	36,368	(NA)	(NA)
Rio Arriba.....	48	1	418	2,116	299	603	1,513	15,405	7,402	1,371	16,872	7,306	6	2,697
San Juan.....	89	5	845	5,367	465	942	2,670	54,714	23,996	4,528	56,848	26,390	879	35,572
Arizona.....	17	-	15	69	10	14	49	258	1,277	65	375	1,225	(NA)	(NA)
Apache.....	13	-	10	48	8	10	35	352	1,051	52	362	1,093	(NA)	(NA)
Utah.....	135	10	533	3,959	298	594	2,063	89,295	32,764	7,464	101,568	27,955	849	74,511
Carbon.....	7	-	6	41	4	7	24	1,167	275	11	1,336	117	(NA)	(NA)
San Juan.....	35	4	122	866	97	196	659	66,989	12,925	3,889	73,418	10,385	879	35,572
Uintah.....	23	1	113	816	66	124	440	17,949	13,309	2,515	24,056	9,716	91	11,780
Pacific.....	892	118	13,543	108,941	8,584	16,740	63,430	914,019	265,159	23,528	988,943	213,763	16,801	2,102,738
Washington.....	13	2	120	1,111	58	99	553	(4)	(D)	7	(D)	564	(NA)	(NA)
California.....	847	112	13,155	104,600	8,342	16,294	60,848	885,899	(D)	22,810	(D)	182,020	16,589	1,020,732
Butte.....	7	-	17	138	9	18	62	1,740	818	105	2,423	240	(NA)	(NA)
Colusa.....	11	-	4	31	3	6	22	4,121	1,276	345	4,468	1,274	1	1,470
Contra Costa.....	11	-	4	27	3	4	18	6,203	1,809	314	2,674	5,652	(NA)	(NA)
Fresno.....	38	6	535	4,222	447	866	3,443	62,761	15,902	2,112	70,753	10,022	621	95,248
Glenn.....	19	-	14	107	9	20	66	4,718	1,075	137	5,221	709	24	6,320
Humboldt.....	4	-	4	23	3	5	18	429	462	18	706	203	(NA)	(NA)
Kern.....	195	31	4,412	33,491	3,255	6,365	23,915	252,398	67,216	6,075	264,784	60,905	4,848	257,390
Kings.....	17	1	68	574	53	99	422	7,403	3,076	63	9,687	855	179	8,925
Los Angeles.....	219	39	4,554	37,027	2,222	4,386	15,456	214,395	50,365	5,010	237,007	32,763	5,802	216,126
Madera.....	3	-	2	16	1	2	6	515	154	16	568	117	(NA)	(NA)

See footnotes at end of table.

TABLE 2B. General Statistics for the Industry, by County: 1963 and 1958—Continued

Division, State, county, and district	1963											1958		
	County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Selected expenses		Value of shipments and receipts	Capital expenditures	All employees on March 15	Value of shipments and receipts
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages		Supplies, purchased fuel and electric energy, and contract work	Purchased machinery installed				
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
Pacific—Continued														
California—Continued														
Monterey.....	8	2	116	902	93	189	718	21,172	4,485	468	24,145	1,980	(NA)	(NA)
Orange.....	78	9	1,388	11,216	803	1,519	6,245	60,702	16,505	1,655	59,999	18,863	1,399	63,687
Sacramento.....	12	2	65	508	25	49	185	14,944	4,435	255	18,756	878	73	10,728
San Benito.....	6	-	12	95	11	28	86	664	168	13	693	152	(NA)	(NA)
San Joaquin.....	18	-	38	338	25	52	235	8,502	4,890	130	12,425	1,097	7	1,510
San Luis Obispo.....	12	-	22	132	17	31	95	3,658	506	112	3,747	529	53	5,960
Santa Barbara.....	24	4	460	3,599	310	609	2,240	50,208	7,210	1,413	53,501	5,330	576	71,945
Solano.....	15	1	62	467	46	89	325	13,905	3,369	259	15,686	1,847	50	8,685
Sutter.....	9	-	13	109	7	13	49	4,689	2,057	63	4,640	2,169	(NA)	(NA)
Tulare.....	6	-	7	51	4	8	21	1,048	513	61	1,451	171	4	1,379
Ventura.....	55	10	1,078	8,377	737	1,486	5,351	82,224	22,808	2,581	91,666	15,947	9,479	149,749
Yolo.....	12	-	2	16	1	2	3	793	301	13	692	415	245	9,435
Undistributed by county.	18	1	56	335	36	63	147	1,490	544	10	1,874	170	215	12,345
Offshore.....	8	1	92	847	82	154	734	76,317	17,999	1,442	77,085	18,673	(NA)	(NA)
Alaska.....	23	4	257	3,151	179	334	1,994	29,959	(D)	708	(D)	30,845	81	(NA)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>The figures for number of "county establishments" represent the number of operations in separate counties as indicated by the county figures included in reports received. The latter reports usually represented all operations of a company in one State or district. The figures for number of establishments shown elsewhere represent the number of reports received.

<sup>2</sup>Excludes figures for Alaska.

<sup>3</sup>For New York, includes figures for separately reported central offices or related facilities in New Jersey; for Michigan includes figures for separately reported central offices or related facilities in Wisconsin.

<sup>4</sup>Not shown since the cost of supplies, purchased fuel and electric energy, contract work, and purchased machinery installed exceeds value of shipments and receipts and capital expenditures.

<sup>5</sup>Undistributed figures for North Louisiana are included with those for South Louisiana.

<sup>6</sup>Represents all offshore Texas operations.

<sup>7</sup>Undistributed figures for all Texas districts are included with those for West Texas A.

<sup>8</sup>Undistributed figures for West New Mexico are included with those for East New Mexico.

TABLE 3A. Detailed Statistics for Selected Geographic Areas: 1963

Item	United States			Middle Atlantic				
	Industry	Crude petroleum subindustry	Natural gas sub-industry	Division, total			New York	
				Industry	Crude petroleum subindustry	Natural gas sub-industry	Industry	Crude petroleum subindustry
Establishments, total.....number..	14,378	12,326	2,052	746	574	172	160	147
With 0 to 19 employees.....do....	13,424	11,537	1,887	716	560	156	155	143
With 20 to 99 employees.....do....	774	639	135	11	77	13	4	4
With 100 employees and over.....do....	180	150	30	6	3	3	1	-
Wells producing during December 1963, total.....do....	573,456	498,047	75,409	57,355	42,592	14,763	12,429	11,534
Oil wells <sup>1</sup> .....do....	488,692	473,147	15,545	42,832	42,285	547	11,608	11,528
Gas wells <sup>2</sup> .....do....	84,764	24,900	59,864	14,523	307	14,216	821	6
Crude petroleum, field condensate, and drips shipped or used.....1,000 barrels..	2,688,873	2,587,961	100,912	6,799	6,754	45	1,976	1,963
Natural gas produced.....million cu. ft..	15,896,477	9,391,637	6,504,840	95,449	3,511	91,938	3,578	373
Natural gas shipped.....do....	13,780,498	7,523,521	6,256,977	89,364	1,174	88,190	3,362	343
Value of shipments and receipts, total.....\$1,000..	9,893,763	8,600,086	1,293,677	56,512	30,062	26,450	9,135	8,054
Crude petroleum, field condensate, drips.....do....	7,671,681	7,377,201	294,480	29,212	29,038	174	7,906	7,847
Natural gas.....do....	2,160,235	1,170,112	990,123	26,216	290	25,926	1,064	42
Amount received or due for services.....do....	46,695	42,406	4,289	606	256	350	165	165
Products purchased and resold without further processing.....do....	15,152	10,367	4,785	478	478	-	-	-
Value added in mining.....do....	9,016,372	7,812,956	1,203,416	50,413	24,886	25,527	7,970	6,830
Persons in industry, total.....number..	159,088	138,431	20,657	5,201	2,848	2,353	955	747
Production, development, and exploration workers, average for the year.....do....	83,444	71,707	11,737	2,966	1,579	1,387	494	332
March.....do....	84,387	72,847	11,540	2,915	1,573	1,342	474	314
May.....do....	83,259	71,765	11,494	2,999	1,613	1,386	496	336
August.....do....	84,250	72,458	11,792	3,025	1,608	1,417	512	345
November.....do....	81,641	70,205	11,436	2,912	1,517	1,395	494	343
All other employees.....do....	61,800	54,135	7,665	1,736	836	900	370	327
Proprietors and firm members.....do....	13,844	12,589	1,255	499	433	66	91	88
Performing manual labor.....do....	6,617	5,812	805	410	355	55	76	73
Man-hours worked by production, development, and exploration workers, total.....1,000..	166,305	142,847	23,458	5,871	3,172	2,699	999	673
Operating and maintaining wells.....do....	131,668	114,610	17,058	4,838	2,883	1,955	730	560
Drilling wells and rig building.....do....	14,881	12,518	2,363	622	159	467	71	57
Exploration work (except drilling).....do....	14,537	12,140	2,397	176	90	86	45	28
Other work.....do....	5,219	3,579	1,640	235	40	195	152	28
Principal expenses designated below, total.....\$1,000..	3,682,502	3,214,972	467,530	44,116	21,624	22,492	9,682	7,359
Wages of production, development, and exploration workers.....do....	494,910	426,811	68,099	13,690	6,440	7,250	2,423	1,364
Salaries of all other employees.....do....	521,521	465,821	55,700	11,650	6,432	5,218	3,434	2,974
Supplies <sup>2</sup> .....do....	1,036,315	903,024	133,291	5,489	2,647	2,842	1,279	968
Purchases for resale.....do....	8,562	7,997	565	476	476	-	-	-
Fuels purchased.....do....	56,833	50,760	6,073	765	679	86	217	212
Electric energy purchased.....do....	77,826	74,871	2,955	940	908	32	100	100
Contract work.....do....	1,486,535	1,285,688	200,847	11,106	4,042	7,064	2,229	1,741
Purchased machinery installed.....do....	421,250	371,288	49,962	3,610	658	2,952	522	209
Capital expenditures, total.....do....	2,209,930	1,906,498	303,432	16,287	4,234	12,053	3,182	2,006
Development and exploration of mineral property.....do....	1,329,563	1,148,649	180,914	8,750	2,715	6,035	1,964	1,473
New structures and additions.....do....	235,420	191,469	43,951	2,760	520	2,240	477	167
New machinery and equipment.....do....	546,228	472,173	74,055	4,380	658	3,722	645	271
Used plant and equipment.....do....	98,719	94,207	4,512	397	341	56	96	95
Energy used.....million kwh. equivalent..	146,168	132,125	14,043	1,521	1,405	116	78	76
Fuels produced and used for fuel at establishment:								
Crude petroleum.....1,000 barrels..	558	555	3	-	-	-	-	-
Natural gas.....million cu. ft..	350,417	320,001	30,416	3,211	2,927	284	35	33
Fuels purchased:								
Distillate fuel oil.....1,000 barrels..	1,272	1,067	205	9	5	4	1	1
Residual fuel oil.....do....	678	660	18	(2)	(2)	-	-	-
Gas.....million cu. ft..	72,724	60,885	11,839	1,314	1,265	49	60	60
Gasoline.....1,000 gallons..	60,494	53,309	7,185	393	275	118	72	63
Other fuels.....\$1,000..	8,030	7,414	616	24	24	-	24	24
Undistributed.....do....	7,472	7,251	221	138	135	3	138	135
Electric energy purchased.....million kw.-hrs..	5,631	5,440	191	60	58	2	5	5
Electric energy generated and used.....do....	376	358	18	(2)	(2)	-	-	-
Wells drilled and completed, except those drilled on contract for others:								
Drilled.....number..	39,886	35,488	4,398	778	543	235	224	196
Footage of wells drilled.....1,000 ft..	171,943	149,279	22,664	1,800	915	885	367	298
Cost of drilling and equipping wells.....\$1,000..	2,050,762	1,749,742	301,020	12,812	4,119	8,693	2,821	2,016
Wells drilled and completed on contract for others:								
Drilled.....number..	2,121	1,985	136	14	11	3	-	-
Footage of wells drilled on contract.....1,000 ft..	6,730	6,196	534	24	19	5	-	-
Costs borne by drilling contractor in drilling and equipping wells.....\$1,000..	23,595	21,169	2,426	48	35	13	-	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	14,235	12,502	1,733	369	208	161	65	50
Per production worker.....hp..	171	174	148	124	132	116	132	151
Prime movers.....1,000 hp..	11,385	9,760	1,625	312	153	159	54	39
Electric motors driven by purchased energy.....do....	2,850	2,742	108	57	55	2	11	11
Horsepower rating of electric motors driven by energy generated at same establishment.....do....	142	125	17	8	(2)	8	-	-

See footnotes at end of table.



TABLE 3A. Detailed Statistics for Selected Geographic Areas: 1963-Continued

Item	Middle Atlantic--Continued			East North Central							
	Pennsylvania			Division, total			Ohio			Indiana	
	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry
Establishments, total.....number..	586	427	159	1,675	1,544	131	499	381	118	284	278
With 0 to 19 employees.....do....	561	417	144	1,597	1,469	128	486	370	116	277	271
With 20 to 99 employees.....do....	20	7	13	73	71	2	13	11	2	7	7
With 100 employees and over.....do....	5	3	2	5	4	1	-	-	-	-	-
Wells producing during December 1963, total....do....	44,926	31,058	13,868	44,603	41,267	3,336	12,029	8,961	3,068	4,717	4,641
Oil wells <sup>1</sup> .....do....	31,224	30,757	467	40,800	40,421	379	8,616	8,302	314	4,637	4,637
Gas wells <sup>1</sup> .....do....	13,702	301	13,401	3,803	846	2,957	3,413	659	2,754	80	4
Crude petroleum, field condensate, and drips shipped and used.....1,000 barrels..	4,823	4,791	32	105,861	105,254	607	5,751	5,431	320	11,842	11,842
Natural gas produced.....million cu. ft..	91,871	3,138	88,733	75,281	38,123	37,158	33,598	7,400	26,198	521	439
Natural gas shipped.....do....	86,002	831	85,171	69,764	33,540	36,224	33,013	7,338	25,675	141	116
Value of shipments and receipts, total.....\$1,000..	47,377	22,008	25,369	330,230	319,134	11,096	26,347	19,083	7,264	32,574	32,485
Crude petroleum, field condensate, drips.....do....	21,306	21,191	115	309,001	307,221	1,780	17,286	16,323	963	31,776	31,776
Natural gas.....do....	25,152	248	24,904	16,523	7,537	8,986	7,648	1,560	6,088	33	13
Amount received or due for services.....do....	441	91	350	4,328	4,003	325	1,406	1,198	208	650	581
Products purchased and resold without further processing.....do....	478	478	-	378	373	5	7	2	5	115	115
Value added in mining.....do....	42,443	18,056	24,387	277,357	267,115	10,242	20,833	15,563	5,270	21,705	21,624
Persons in industry, total.....number..	4,246	2,101	2,145	9,280	8,759	521	1,936	1,526	410	1,275	1,271
Production, development, and exploration workers, average for the year.....do....	2,472	1,247	1,225	5,993	5,684	309	1,101	859	242	628	626
March.....do....	2,440	1,258	1,182	6,090	5,771	319	1,207	955	252	625	623
May.....do....	2,502	1,276	1,226	6,003	5,697	306	1,049	810	239	655	653
August.....do....	2,512	1,262	1,250	6,001	5,695	306	1,076	837	239	634	632
November.....do....	2,417	1,183	1,234	5,857	5,552	305	1,074	836	238	596	594
All other employees.....do....	1,366	509	857	1,982	1,876	106	472	410	62	414	412
Proprietors and firm members.....do....	408	345	63	1,305	1,199	106	363	257	106	233	233
Performing manual labor.....do....	334	282	52	949	876	73	288	215	73	141	141
Man-hours worked by production, development, and exploration workers, total.....1,000..	4,872	2,499	2,373	11,483	10,906	577	2,117	1,674	443	1,087	1,083
Operating and maintaining wells.....do....	4,108	2,323	1,785	9,537	9,009	528	1,758	1,358	400	862	862
Drilling wells and rig building.....do....	551	102	449	1,255	1,241	14	172	158	14	138	138
Exploration work (except drilling).....do....	130	62	68	412	378	34	161	133	28	43	39
Other work.....do....	83	12	71	279	278	1	26	25	1	44	44
Principal expenses designated below, total...\$1,000..	34,434	14,265	20,169	122,954	115,595	7,359	21,435	16,024	5,411	19,146	19,104
Wages of production, development, and exploration workers.....do....	11,267	5,076	6,191	28,541	27,049	1,492	4,355	3,281	1,074	2,406	2,403
Salaries of all other employees.....do....	8,216	3,458	4,758	14,080	13,567	513	3,331	3,129	202	3,292	3,286
Supplies <sup>2</sup> .....do....	4,210	1,679	2,531	28,402	26,620	1,782	3,742	2,575	1,167	5,832	5,826
Purchases for resale.....do....	476	476	-	150	142	8	8	-	8	5	5
Fuels purchased.....do....	548	467	81	3,350	3,246	104	269	195	74	1,106	1,106
Electric energy purchased.....do....	840	808	32	8,270	8,232	38	177	169	8	1,166	1,166
Contract work.....do....	8,877	2,301	6,576	40,161	36,739	3,422	9,553	6,675	2,878	5,339	5,312
Purchased machinery installed.....do....	3,088	449	2,639	16,227	15,567	660	2,192	1,758	434	1,261	1,175
Capital expenditures, total.....do....	13,105	2,228	10,877	43,687	38,527	5,160	10,427	7,852	2,575	3,840	3,729
Development and exploration of mineral property.....do....	6,786	1,242	5,544	20,557	19,019	1,538	5,903	4,765	1,138	1,271	1,208
New structures and additions.....do....	2,283	353	1,930	6,372	4,857	1,515	1,549	767	782	517	497
New machinery and equipment.....do....	3,735	387	3,348	13,912	12,549	1,363	2,795	2,171	624	1,843	1,816
Used plant and equipment.....do....	301	246	55	2,846	2,102	744	180	149	31	209	208
Energy used.....million kwh. equivalent..	1,443	1,329	114	2,614	2,548	66	170	115	55	511	511
Fuels produced and used for fuel at establishment:											
Crude petroleum.....1,000 barrels..	-	-	-	50	50	-	32	32	-	6	6
Natural gas.....million cu. ft..	3,176	2,894	282	3,741	3,605	136	164	28	136	365	365
Fuels purchased:											
Distillate fuel oil.....1,000 barrels..	8	4	4	34	27	7	5	2	3	6	6
Residual fuel oil.....do....	(2)	(2)	-	8	8	-	(2)	(2)	-	-	-
Gas.....million cu. ft..	1,254	1,205	49	599	598	1	18	17	1	119	119
Gasoline.....1,000 gallons..	321	212	109	3,041	2,815	226	444	278	166	422	422
Other fuels.....\$1,000..	-	-	-	503	503	-	3	3	-	47	47
Undistributed.....do....	-	-	-	1,546	1,540	6	102	96	6	870	870
Electric energy purchased.....million kw.-hrs..	55	53	2	512	510	2	9	9	(2)	104	104
Electric energy generated and used.....do....	(2)	(2)	-	5	5	-	(2)	(2)	-	1	1
Wells drilled and completed, except those drilled on contract for others:											
Drilled.....number..	554	347	207	3,781	3,507	274	976	728	248	574	570
Footage of wells drilled.....1,000 ft..	1,433	617	816	8,681	7,760	921	2,767	1,908	859	911	907
Cost of drilling and equipping wells.....\$1,000..	9,991	2,103	7,888	56,243	49,905	6,338	18,424	12,623	5,801	4,659	4,637
Wells drilled and completed on contract for others:											
Drilled.....number..	14	11	3	316	315	1	15	14	1	29	29
Footage of wells drilled on contract.....1,000 ft..	24	19	5	700	(D)	(D)	50	(D)	(D)	62	62
Costs borne by drilling contractor in drilling and equipping wells.....\$1,000..	48	35	13	2,385	(D)	(D)	173	(D)	(D)	198	198
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	303	157	146	706	671	35	130	102	28	65	65
Per production worker.....hp..	123	126	119	118	118	113	118	119	116	104	104
Prime movers.....1,000 hp..	257	113	144	551	518	33	119	92	27	48	48
Electric motors driven by purchased energy.....do....	46	44	2	155	153	2	11	10	1	17	17
Horsepower rating of electric motors driven by energy generated at same establishment.....do....	8	(Z)	8	4	4	-	(Z)	(Z)	-	(Z)	(Z)

See footnotes at end of table.



TABLE 3A. Detailed Statistics for Selected Geographic Areas: 1963—Continued

Item	East North Central--Continued					West North Central				
	Illinois	Michigan	Division			North Dakota	Nebraska	Kansas		
			Industry	Crude petroleum sub-industry	Natural gas sub-industry			Industry	Crude petroleum sub-industry	Natural gas sub-industry
Establishments, total.....number..	683	209	1,254	1,190	64	62	121	1,047	986	61
With 0 to 19 employees.....do....	640	194	1,160	1,106	54	59	117	961	910	51
With 20 to 99 employees.....do....	39	14	81	73	8	2	4	74	66	8
With 100 employees and over.....do....	4	1	13	11	2	1	-	12	10	2
Wells producing during December 1963, total.....do....	23,900	3,957	45,064	40,484	4,580	1,332	1,587	42,030	37,470	4,560
Oil wells.....do....	23,861	3,686	39,451	38,225	1,226	1,326	1,533	36,477	35,255	1,222
Gas wells.....do....	39	271	5,613	2,259	3,354	6	54	5,553	2,215	3,338
Crude petroleum, field condensate, and drips shipped or used.....1,000 barrels..	71,814	16,454	149,613	143,788	5,825	22,559	20,009	106,758	100,933	5,825
Natural gas produced.....million cu. ft..	8,547	32,615	774,204	297,908	476,296	32,918	8,920	732,366	256,798	475,568
Natural gas shipped.....do....	6,188	30,422	761,493	289,862	471,631	31,209	7,582	722,575	251,659	470,916
Value of shipments and receipts, total.....\$1,000..	216,457	54,852	527,043	446,652	80,391	64,798	57,848	403,579	323,284	80,295
Crude petroleum, field condensate, drips.....do....	213,139	46,800	419,819	403,635	16,184	61,853	56,264	301,042	284,858	16,184
Natural gas.....do....	867	7,975	99,779	35,666	64,113	2,652	1,299	95,827	31,794	64,033
Amount received or due for services.....do....	2,224	48	7,355	7,263	92	291	285	6,622	6,544	78
Products purchased and resold without further processing.....do....	227	29	90	88	2	2	-	88	88	-
Value added in mining.....do....	186,903	47,916	455,917	380,842	75,075	54,999	50,017	350,739	276,349	74,390
Persons in industry, total.....number..	4,844	1,218	9,373	8,455	918	444	442	8,194	7,421	773
Production, development, and exploration workers, average for the year.....do....	3,474	790	6,277	5,732	545	281	292	5,696	5,154	542
March.....do....	3,463	795	6,359	5,806	553	287	250	5,817	5,267	550
May.....do....	3,488	811	6,266	5,734	532	276	293	5,686	5,157	529
August.....do....	3,493	798	6,249	5,681	568	292	317	5,626	5,061	565
November.....do....	3,434	753	6,263	5,734	529	279	308	5,651	5,125	526
All other employees.....do....	794	295	2,217	1,870	347	147	99	1,698	1,491	207
Proprietors and firm members.....do....	576	133	879	853	26	16	51	803	779	24
Performing manual labor.....do....	410	110	629	618	11	10	33	577	568	9
Man-hours worked by production, development, and exploration workers, total.....1,000..	6,643	1,636	12,709	11,635	1,074	587	593	11,509	10,442	1,067
Operating and maintaining wells.....do....	5,667	1,250	9,722	8,956	766	414	432	8,878	8,115	763
Drilling wells and rig building.....do....	688	257	1,753	1,705	48	11	110	1,627	1,579	48
Exploration work (except drilling).....do....	155	53	788	645	143	156	28	588	445	143
Other work.....do....	133	76	446	329	117	6	23	416	303	113
Principal expenses designated below, total.....\$1,000..	62,447	19,844	173,390	156,955	16,435	18,598	15,832	135,456	120,023	15,433
Wages of production, development, and exploration workers.....do....	17,146	4,634	32,491	28,881	3,610	1,815	1,802	28,830	25,232	3,598
Salaries of all other employees.....do....	5,361	2,014	15,057	13,080	1,977	1,088	731	11,361	9,994	1,367
Supplies.....do....	14,769	4,059	45,080	41,841	3,239	5,757	4,320	34,428	31,236	3,192
Purchases for resale.....do....	128	9	18	18	-	-	-	18	18	-
Fuels purchased.....do....	1,532	443	7,135	6,811	324	290	733	6,095	5,771	324
Electric energy purchased.....do....	6,577	350	7,075	6,571	504	285	613	6,150	5,646	504
Contract work.....do....	16,934	8,335	66,534	59,753	6,781	9,363	7,633	48,574	42,126	6,448
Purchased machinery installed.....do....	10,762	2,012	24,880	22,772	2,108	4,606	1,790	18,380	16,272	2,108
Capital expenditures, total.....do....	21,148	8,272	79,596	71,956	7,640	10,502	7,258	60,805	54,134	6,671
Development and exploration of mineral property.....do....	10,232	3,151	39,117	35,261	3,856	4,186	3,820	30,312	26,516	3,796
New structures and additions.....do....	2,977	1,329	9,625	8,615	1,010	814	837	7,955	7,530	425
New machinery and equipment.....do....	6,599	2,675	26,035	23,719	2,316	4,639	2,171	19,023	16,711	2,312
Used plant and equipment.....do....	1,340	1,117	4,819	4,361	458	863	430	3,515	3,377	138
Energy used.....million kwh. equivalent..	1,397	536	7,028	6,546	482	538	953	5,534	5,052	482
Fuels produced and used for fuel at establishment:										
Crude petroleum.....1,000 barrels..	4	8	9	9	-	-	2	7	7	-
Natural gas.....million cu. ft..	1,873	1,339	4,810	3,973	837	1,168	1,210	2,431	1,594	837
Fuels purchased:										
Distillate fuel oil.....1,000 barrels..	16	7	88	85	3	-	2	86	83	3
Residual fuel oil.....do....	8	-	64	64	-	-	4	60	60	-
Gas.....million cu. ft..	425	37	13,524	12,996	528	399	1,439	11,686	11,158	528
Gasoline.....1,000 gallons..	1,553	622	4,660	4,172	488	405	407	3,844	3,356	488
Other fuels.....\$1,000..	337	116	1,158	1,155	3	77	160	909	906	3
Undistributed.....do....	494	80	815	784	31	36	144	631	600	31
Electric energy purchased.....million kw.-hrs..	382	17	454	423	31	13	35	406	375	31
Electric energy generated and used.....do....	4	(2)	6	6	-	-	(2)	6	6	-
Wells drilled and completed, except those drilled on contract for others:										
Drilled.....number..	1,570	553	4,304	4,131	173	162	440	3,676	3,506	170
Footage of wells drilled.....1,000 ft..	2,447	1,556	13,749	13,062	687	1,020	2,080	6,118	5,452	666
Cost of drilling and equipping wells.....\$1,000..	22,291	10,869	93,605	88,372	5,233	11,588	9,681	71,229	66,049	5,180
Wells drilled and completed on contract for others:										
Drilled.....number..	134	138	368	368	-	-	19	349	349	-
Footage of wells drilled on contract.....1,000 ft..	339	249	1,118	1,118	-	-	74	1,114	1,114	-
Costs borne by drilling contractor in drilling and equipping wells.....\$1,000..	1,163	851	3,641	3,641	-	-	184	3,457	3,457	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	354	157	1,021	953	68	85	67	855	787	68
Per production worker.....do....	102	199	163	166	125	302	229	150	153	125
Prime movers.....1,000 hp..	239	145	851	794	57	78	57	704	647	57
Electric motors driven by purchased energy.....do....	115	12	170	159	11	7	10	151	140	11
Horsepower rating of electric motors driven by energy generated at same establishment.....do....	2	2	2	2	-	-	(2)	2	2	-

See footnotes at end of table.

TABLE 3A. Detailed Statistics for Selected Geographic Areas: 1963—Continued

Item	South Atlantic						East South Central					
	Division			West Virginia			Division			Kentucky		
	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry
Establishments, total.....number..	878	434	444	858	422	436	693	625	68	455	405	50
With 0 to 19 employees.....do....	858	428	430	838	416	422	651	587	64	435	388	47
With 20 to 99 employees.....do....	15	5	10	15	5	10	34	31	3	17	15	2
With 100 employees and over.....do....	5	1	4	5	1	4	8	7	1	3	2	1
Wells producing during December 1963, total.....do....	21,960	7,835	14,125	21,820	7,819	14,001	21,674	17,713	3,961	18,179	14,337	3,842
Oil wells <sup>1</sup> .....do....	7,335	6,852	483	7,319	6,836	483	16,649	16,506	143	13,509	13,393	116
Gas wells <sup>1</sup> .....do....	14,625	983	13,642	14,501	983	13,518	5,025	1,207	3,818	4,670	944	3,726
Crude petroleum, field condensate, and drips shipped or used.....1,000 barrels..	3,708	3,562	146	(D)	(D)	146	85,098	84,569	529	18,740	18,704	36
Natural gas produced.....million cu. ft..	189,427	13,529	175,898	185,656	13,529	172,127	289,241	193,800	95,441	70,796	11,940	58,856
Natural gas shipped.....do....	183,247	12,336	170,911	179,649	12,336	167,313	236,823	144,808	92,015	68,226	11,481	56,745
Value of shipments and receipts, total.....\$1,000..	61,472	15,704	45,768	58,855	14,348	44,507	281,517	261,828	19,689	69,283	57,335	11,948
Crude petroleum, field condensate, drips.....do....	12,656	12,141	515	(D)	(D)	515	234,349	232,858	1,491	54,056	53,960	96
Natural gas.....do....	47,369	2,787	44,582	46,378	2,787	43,591	45,295	27,285	18,010	14,410	2,745	11,665
Amount received or due for services.....do....	1,177	776	401	(D)	(D)	131	1,827	1,639	188	771	584	187
Products purchased and resold without further processing.....do....	270	-	270	-	-	270	46	46	-	46	46	-
Value added in mining.....do....	52,060	10,207	41,853	50,212	9,658	40,554	237,310	218,075	19,235	58,780	45,824	12,956
Persons in industry, total.....number..	3,957	1,833	2,124	3,753	1,644	2,109	5,596	4,679	917	2,902	2,075	827
Production, development, and exploration workers, average for the year.....do....	2,598	1,142	1,456	2,554	1,110	1,444	3,133	2,439	694	2,111	1,459	652
March.....do....	2,640	1,205	1,435	2,598	1,177	1,421	3,197	2,525	672	2,177	1,550	627
May.....do....	2,580	1,128	1,452	2,541	1,100	1,441	3,098	2,398	700	2,085	1,426	659
August.....do....	2,594	1,122	1,472	2,557	1,096	1,461	3,195	2,446	749	2,173	1,466	707
November.....do....	2,548	1,084	1,464	2,520	1,067	1,453	3,011	2,353	658	2,006	1,389	617
All other employees.....do....	840	432	408	684	277	407	1,459	1,272	187	455	307	148
Proprietors and firm members.....do....	519	259	260	515	257	258	1,004	968	36	336	309	27
Performing manual labor.....do....	409	211	198	405	209	196	356	322	34	266	239	27
Man-hours worked by production, development, and exploration workers, total.....1,000..	5,098	2,277	2,821	5,033	2,235	2,798	6,095	4,837	1,258	3,930	2,742	1,188
Operating and maintaining wells.....do....	4,219	1,900	2,319	4,181	1,884	2,297	4,152	3,687	465	2,752	2,351	401
Drilling wells and rig building.....do....	525	225	300	521	222	299	687	488	199	490	291	199
Exploration work (except drilling).....do....	221	118	103	198	95	103	636	627	9	82	76	6
Other work.....do....	133	34	99	133	34	99	620	35	585	606	24	582
Principal expenses designated below, total.....\$1,000..	47,098	16,957	30,141	43,785	14,158	29,627	109,781	99,805	9,976	31,137	23,925	7,212
Wages of production, development, and exploration workers.....do....	10,354	4,278	6,076	10,171	4,155	6,016	15,621	12,381	3,240	8,851	5,887	2,964
Salaries of all other employees.....do....	4,796	2,484	2,312	3,354	1,054	2,300	10,893	9,597	1,296	2,416	1,423	993
Supplies <sup>2</sup> .....do....	9,851	3,797	6,054	9,325	3,423	5,902	27,450	25,533	1,917	7,553	5,855	1,698
Purchases for resale.....do....	-	-	-	-	-	-	10	10	-	10	10	-
Fuels purchased.....do....	447	199	248	425	182	243	2,057	1,994	63	381	333	48
Electric energy purchased.....do....	182	95	87	178	92	86	2,810	2,748	62	1,227	1,182	45
Contract work.....do....	21,468	6,104	15,364	20,332	5,252	15,080	50,940	47,542	3,398	10,699	9,235	1,464
Purchased machinery installed.....do....	4,602	1,276	3,326	4,518	1,226	3,292	12,121	10,998	1,123	4,834	3,884	950
Capital expenditures, total.....do....	27,138	5,974	21,164	26,135	5,485	20,650	51,181	45,072	6,109	14,201	8,988	5,213
Development and exploration of mineral property.....do....	18,073	4,237	13,836	17,416	3,957	13,459	27,771	24,620	3,151	6,615	4,179	2,436
New structures and additions.....do....	3,224	391	2,833	3,025	204	2,821	4,841	3,528	1,313	2,072	779	1,293
New machinery and equipment.....do....	5,447	1,305	4,142	5,304	1,285	4,019	16,787	15,151	1,636	5,289	3,809	1,480
Used plant and equipment.....do....	394	41	353	390	39	351	1,782	1,773	9	225	221	4
Energy used.....million kwh. equivalent..	1,199	277	922	1,191	273	918	3,962	3,585	377	593	272	321
Fuels produced and used for fuel at establishment:												
Crude petroleum.....1,000 barrels..	-	-	-	-	-	-	4	4	-	4	4	-
Natural gas.....million cu. ft..	3,274	726	2,548	3,261	726	2,535	8,859	7,677	1,182	1,354	346	1,008
Fuels purchased:												
Distillate fuel oil.....1,000 barrels..	21	1	20	21	1	20	9	9	(Z)	4	4	(Z)
Residual fuel oil.....do....	2	2	-	1	1	-	6	6	-	1	1	-
Gas.....million cu. ft..	337	71	266	337	71	266	2,438	2,428	10	60	54	6
Gasoline.....1,000 gallons..	669	152	517	639	129	510	1,417	1,237	180	518	373	145
Other fuels.....\$1,000..	2	2	-	2	2	-	248	248	-	51	51	-
Undistributed.....do....	59	59	-	54	54	-	569	566	3	128	127	1
Electric energy purchased.....million kw.-hrs..	10	6	4	10	6	4	203	200	3	80	77	3
Electric energy generated and used.....do....	2	2	-	2	2	-	2	2	(Z)	2	2	(Z)
Wells drilled and completed, except those drilled on contract for others:												
Drilled.....number..	1,024	357	667	1,023	356	667	2,199	2,047	152	1,461	1,322	139
Footage of wells drilled.....1,000 ft..	2,734	797	1,937	(D)	(D)	1,937	8,523	8,096	427	2,458	2,065	393
Cost of drilling and equipping wells.....\$1,000..	28,602	7,386	20,676	(D)	(D)	20,676	70,153	65,733	4,420	17,105	13,153	3,952
Wells drilled and completed on contract for others:												
Drilled.....number..	4	2	2	4	2	2	111	111	-	102	102	-
Footage of wells drilled on contract.....1,000 ft..	10	(D)	(D)	10	(D)	(D)	238	238	-	179	179	-
Costs borne by drilling contractor in drilling and equipping wells.....\$1,000..	66	(D)	(D)	66	(D)	(D)	852	852	-	609	609	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	303	144	159	292	136	156	384	343	41	161	128	33
Per production worker.....hp..	117	126	109	114	123	108	123	141	59	76	88	51
Prime movers.....1,000 hp..	276	123	153	266	116	150	318	278	40	127	95	32
Electric motors driven by purchased energy.....do....	27	21	6	26	20	6	66	65	1	34	33	1
Horsepower rating of electric motors driven by energy generated at same establishment.....do....	2	2	(Z)	2	2	(Z)	2	2	-	1	1	-

See footnotes at end of table.

TABLE 3A. Detailed Statistics for Selected Geographic Areas: 1963—Continued

Item	East South Central—Continued				West South Central					
	Alabama	Mississippi			Division, total			Arkansas		
		Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry
Establishments, total.....number..	27	198	183	15	7,499	6,533	966	212	201	11
With 0 to 19 employees.....do....	26	177	163	14	6,974	6,097	877	199	190	9
With 20 to 99 employees.....do....	1	16	15	1	418	345	73	12	10	2
With 100 employees and over.....do....	-	5	5	-	107	91	16	1	1	-
Wells producing during December 1963, total.....do....	428	3,037	2,918	119	307,293	280,543	26,750	4,202	3,953	249
Oil wells.....do....	428	2,683	2,656	27	275,382	263,569	11,813	3,947	3,916	31
Gas wells.....do....	-	354	262	92	31,911	16,974	14,937	255	37	218
Crude petroleum, field condensate, and drips shipped or used.....1,000 barrels..	7,743	58,581	58,088	493	1,674,619	1,588,978	85,641	20,597	20,536	61
Natural gas produced.....million cu. ft..	-	218,445	181,860	36,585	12,328,403	7,406,675	4,921,728	88,642	42,535	46,107
Natural gas shipped.....do....	-	168,597	133,327	35,270	10,725,423	6,027,810	4,697,613	64,858	21,095	43,763
Value of shipments and receipts, total.....\$1,000..	20,404	191,529	183,788	7,741	6,585,864	5,611,558	974,306	68,982	57,769	11,213
Crude petroleum, field condensate, drips.....do....	20,306	159,888	158,493	1,395	4,955,331	4,702,886	252,445	53,804	53,646	158
Natural gas.....do....	-	30,885	24,540	6,345	1,595,714	879,583	716,131	13,620	3,329	10,291
Amount received or due for services.....do....	98	756	755	1	24,428	22,709	1,719	1,558	794	764
Products purchased and resold without further processing.....do....	-	-	-	-	10,391	6,380	4,011	-	-	-
Value added in mining.....do....	15,567	162,838	156,519	6,319	6,060,004	5,150,812	909,192	58,488	49,312	9,186
Persons in industry, total.....number..	677	2,004	1,917	87	99,895	88,927	10,968	1,451	1,271	180
Production, development, and exploration workers, average for the year.....do....	80	939	897	42	47,283	41,754	5,529	891	766	125
March.....do....	93	924	879	45	47,895	42,321	5,574	994	869	125
May.....do....	79	931	890	41	47,189	41,730	5,459	831	720	111
August.....do....	81	938	896	42	47,610	41,999	5,611	856	728	128
November.....do....	69	933	892	41	46,306	40,838	5,468	874	740	134
All other employees.....do....	52	947	909	38	43,721	38,910	4,811	316	266	50
Proprietors and firm members.....do....	545	118	111	7	8,891	8,263	628	244	239	5
Performing manual labor.....do....	4	81	76	5	3,380	3,014	366	115	113	2
Man-hours worked by production, development, and exploration workers, total.....1,000..	205	1,954	1,884	70	95,115	83,674	11,441	1,878	1,591	287
Operating and maintaining wells.....do....	148	1,250	1,186	64	76,138	67,821	8,317	1,234	1,186	48
Drilling wells and rig building.....do....	5	190	190	-	8,010	6,885	1,125	340	130	210
Exploration work (except drilling).....do....	52	500	497	3	8,326	6,823	1,503	150	130	20
Other work.....do....	-	14	11	3	2,641	2,145	496	154	145	9
Principal expenses designated below, total.....\$1,000..	9,830	68,587	65,875	2,712	2,440,300	2,127,866	312,434	26,238	20,727	5,511
Wages of production, development, and exploration workers.....do....	462	6,286	6,010	276	286,077	250,717	35,360	4,571	3,873	698
Salaries of all other employees.....do....	395	8,066	7,773	293	378,274	340,323	37,951	2,117	1,771	346
Supplies.....do....	1,798	18,047	17,828	219	718,143	619,045	99,098	7,477	5,397	2,080
Purchases for resale.....do....	-	-	-	-	5,059	4,502	557	-	-	-
Fuels purchased.....do....	360	1,316	1,301	15	35,446	30,980	4,466	868	807	61
Electric energy purchased.....do....	701	882	865	17	37,387	35,377	2,010	846	830	16
Contract work.....do....	6,114	33,990	32,098	1,892	979,914	846,922	132,992	10,359	8,049	2,310
Purchased machinery installed.....do....	318	6,968	6,795	173	275,570	242,998	32,572	3,319	2,718	601
Capital expenditures, total.....do....	4,454	32,512	31,618	894	1,525,659	1,319,078	206,581	12,375	9,334	3,041
Development and exploration of mineral property.....do....	3,311	17,838	17,123	715	892,588	765,705	126,883	7,503	5,477	2,026
New structures and additions.....do....	460	2,307	2,287	20	167,340	142,450	24,890	818	591	227
New machinery and equipment.....do....	502	10,992	10,838	154	397,257	344,656	52,601	3,631	2,887	744
Used plant and equipment.....do....	181	1,375	1,370	5	68,474	66,267	2,207	423	379	44
Energy used.....million kwh. equivalent..	325	3,044	2,988	56	98,208	87,010	11,198	1,062	999	63
Fuels produced and used for fuel at establishment:										
Crude petroleum.....1,000 barrels..	-	-	-	-	156	156	-	-	-	-
Natural gas.....million cu. ft..	457	7,048	6,874	174	242,417	218,069	24,348	1,314	1,293	21
Fuels purchased:										
Distillate fuel oil.....1,000 barrels..	(2)	5	5	-	994	828	166	4	2	2
Residual fuel oil.....do....	-	5	-	-	518	507	11	1	1	-
Gas.....million cu. ft..	211	2,167	2,163	4	46,988	37,398	9,590	1,563	1,410	153
Gasoline.....1,000 gallons..	42	857	822	35	38,441	34,301	4,140	355	323	32
Other fuels.....\$1,000..	3	194	194	-	4,639	4,089	550	135	132	3
Undistributed.....do....	227	214	212	2	4,033	3,897	136	264	250	14
Electric energy purchased.....million kw.-hrs..	62	61	61	(2)	2,737	2,600	137	58	57	1
Electric energy generated and used.....do....	-	18	(2)	-	278	263	15	(2)	(2)	(2)
Wells drilled and completed, except those drilled on contract for others:										
Drilled.....number..	56	655	648	7	21,899	19,685	2,214	381	349	32
Footage of wells drilled.....1,000 ft..	(D)	5,479	5,449	30	110,560	96,519	14,041	1,511	1,331	180
Cost of drilling and equipping wells.....\$1,000..	(D)	46,163	45,737	426	1,410,063	1,202,557	207,506	12,836	9,800	3,036
Wells drilled and completed on contract for others:										
Drilled.....number..	-	9	9	-	1,182	1,075	107	43	33	10
Footage of wells drilled on contract.....1,000 ft..	-	59	59	-	4,036	3,578	458	149	108	41
Costs borne by drilling contractor in drilling and equipping wells.....\$1,000..	-	243	243	-	13,226	11,453	1,773	991	374	617
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	23	198	190	8	8,599	7,560	1,039	132	116	16
Per production worker.....hp..	288	211	212	190	182	181	188	148	151	128
Prime movers.....1,000 hp..	11	179	171	8	6,897	5,891	966	107	92	15
Electric motors driven by purchased energy.....do....	12	19	19	-	1,742	1,669	73	25	24	1
Horsepower rating of electric motors driven by energy generated at same establishment.....do....	-	1	1	-	87	79	8	(2)	(2)	-

See footnotes at end of table.

TABLE 3A Detailed Statistics for Selected Geographic Areas: 1963—Continued

Item	West South Central--Continued								
	Louisiana, total			North Louisiana			South Louisiana		
	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry
Establishments, total.....number..	743	612	131	451	391	60	292	221	71
With 0 to 19 employees.....do....	661	554	107	415	366	49	246	188	58
With 20 to 99 employees.....do....	60	43	17	33	23	10	27	20	7
With 100 employees and over.....do....	22	15	7	3	2	1	19	13	6
Wells producing during December 1963, total.....do....	30,838	25,332	5,506	15,576	12,081	3,495	15,262	13,251	2,011
Oil wells <sup>1</sup> .....do....	24,195	22,591	1,604	12,087	11,487	600	12,108	11,104	1,004
Gas wells <sup>1</sup> .....do....	6,643	2,741	3,902	3,489	594	2,895	3,154	2,147	1,007
Crude petroleum, field condensate, and drips shipped or used.....1,000 barrels..	501,969	467,090	34,879	52,718	48,348	4,370	449,251	418,742	30,509
Natural gas produced.....million cu. ft..	4,111,634	2,393,412	1,718,222	579,754	218,950	360,804	3,531,880	2,174,462	1,357,418
Natural gas shipped.....do....	3,686,848	2,021,537	1,665,311	480,766	152,847	327,919	3,206,082	1,868,690	1,337,392
Value of shipments and receipts, total.....\$1,000..	2,236,901	1,822,778	414,123	228,692	168,261	60,431	2,008,209	1,654,517	353,692
Crude petroleum, field condensate, drips.....do....	1,542,217	1,434,879	107,338	154,408	142,030	12,378	1,387,809	1,292,849	94,960
Natural gas.....do....	690,724	384,438	306,286	72,051	24,064	47,987	618,673	360,374	258,299
Amount received or due for services.....do....	3,350	3,291	59	2,010	2,010	-	1,340	1,281	59
Products purchased and resold without further processing.....do....	610	170	440	223	157	66	387	13	374
Value added in mining.....do....	2,107,158	1,719,301	387,857	208,899	150,101	58,798	1,898,259	1,569,200	329,059
Persons in industry, total.....number..	18,019	15,164	2,855	3,534	2,778	756	14,484	12,386	2,098
Production, development, and exploration workers, average for the year.....do....	10,603	8,478	2,125	2,135	1,623	512	8,468	6,855	1,613
March.....do....	10,719	8,644	2,075	2,131	1,629	502	8,584	7,015	1,569
May.....do....	10,607	8,516	2,091	2,169	1,649	520	8,434	6,867	1,567
August.....do....	10,672	8,471	2,201	2,172	1,630	542	8,496	6,841	1,655
November.....do....	10,370	8,249	2,121	2,049	1,569	480	8,317	6,680	1,637
All other employees.....do....	6,458	5,805	653	954	765	189	5,504	5,040	464
Proprietors and firm members.....do....	958	881	77	445	390	55	512	491	21
Performing manual labor.....do....	273	245	28	211	197	14	61	48	13
Man-hours worked by production, development, and exploration workers, total.....1,000..	22,207	17,779	4,428	4,441	3,437	1,004	17,766	14,342	3,424
Operating and maintaining wells.....do....	17,054	13,829	3,225	3,817	2,969	848	13,237	10,860	2,377
Drilling wells and rig building.....do....	2,728	2,211	517	254	233	21	2,474	1,978	496
Exploration work (except drilling).....do....	1,952	1,375	577	240	178	62	1,712	1,197	515
Other work.....do....	473	364	109	130	57	73	343	307	36
Principal expenses designated below, total.....\$1,000..	798,941	664,326	134,615	77,809	65,777	12,032	721,132	598,549	122,583
Wages of production, development, and exploration workers.....do....	72,978	58,447	14,531	11,600	8,769	2,831	61,378	49,678	11,700
Salaries of all other employees.....do....	58,845	53,728	5,117	7,445	6,021	1,424	51,400	47,707	3,693
Supplies <sup>2</sup> .....do....	279,647	230,392	49,255	17,321	14,750	2,571	262,326	215,642	46,684
Purchases for resale.....do....	197	149	48	197	149	48	-	-	-
Fuels purchased.....do....	9,913	8,359	1,554	1,522	1,036	486	8,391	7,323	1,068
Electric energy purchased.....do....	1,942	1,723	219	816	741	75	1,126	982	144
Contract work.....do....	375,419	311,528	63,891	38,908	34,311	4,597	336,511	277,217	59,294
Purchased machinery installed.....do....	91,748	74,807	16,941	10,246	8,603	1,643	81,502	66,204	15,298
Capital expenditures, total.....do....	629,123	523,481	105,642	49,217	41,430	7,787	579,906	482,051	97,855
Development and exploration of mineral property.....do....	415,509	352,207	63,302	30,974	26,099	4,875	384,538	326,108	58,430
New structures and additions.....do....	64,826	53,248	11,578	3,882	3,340	542	60,943	49,908	11,035
New machinery and equipment.....do....	145,094	115,034	30,060	13,436	11,397	2,039	131,656	103,637	28,019
Used plant and equipment.....do....	3,694	2,992	702	925	594	331	2,769	2,398	371
Energy used.....million kwh. equivalent..	35,609	32,853	2,756	6,928	5,680	1,248	28,681	27,173	1,508
Fuels produced and used for fuel at establishment:									
Crude petroleum.....1,000 barrels..	57	57	-	55	55	-	2	2	-
Natural gas.....million cu. ft..	97,906	91,954	5,952	18,992	16,409	2,583	78,914	75,545	3,369
Fuels purchased:									
Distillate fuel oil.....1,000 barrels..	624	552	72	15	15	-	609	537	72
Residual fuel oil.....do....	346	346	-	1	1	-	345	345	-
Gas.....million cu. ft..	9,807	7,625	2,182	2,396	1,013	1,383	7,411	6,612	799
Gasoline.....1,000 gallons..	6,793	5,779	1,014	1,413	1,118	295	5,380	4,661	719
Other fuels.....\$1,000..	669	384	285	141	132	9	528	252	276
Undistributed.....do....	558	506	52	394	342	52	164	164	-
Electric energy purchased.....million kw.-hrs..	121	109	12	45	42	3	76	67	9
Electric energy generated and used.....do....	213	202	11	3	3	(2)	210	199	11
Wells drilled and completed, except those drilled on contract for others:									
Drilled.....number..	4,764	4,199	565	2,497	2,285	212	2,267	1,914	353
Footage of wells drilled.....1,000 ft..	32,748	28,133	4,615	9,874	9,151	723	22,874	18,982	3,892
Cost of drilling and equipping wells.....\$1,000..	599,993	493,675	106,318	59,070	52,552	6,518	540,923	441,123	99,800
Wells drilled and completed on contract for others:									
Drilled.....number..	124	124	-	110	110	-	14	14	-
Footage of wells drilled on contract.....1,000 ft..	464	464	-	320	320	-	144	144	-
Costs borne by drilling contractor in drilling and equipping wells.....\$1,000..	1,551	1,551	-	1,079	1,079	-	472	472	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	1,407	1,146	261	349	262	87	1,058	884	174
Per production worker.....hp..	133	135	123	163	161	170	125	129	108
Prime movers.....1,000 hp..	1,335	1,082	253	314	232	82	1,021	850	171
Electric motors driven by purchased energy.....do....	72	64	8	35	30	5	37	34	3
Horsepower rating of electric motors driven by energy generated at same establishment.....do....	42	38	4	2	2	-	40	36	4

See footnotes at end of table.

TABLE 3A. Detailed Statistics for Selected Geographic Areas: 1963—Continued

Item	West South Central—Continued								
	Oklahoma			Texas, total			Texas Gulf Coast A		
	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry
Establishments, total.....number..	1,603	1,459	144	4,941	4,261	680	425	358	67
With 0 to 19 employees.....do....	1,497	1,358	139	4,617	3,995	622	368	312	56
With 20 to 99 employees.....do....	87	83	4	259	209	50	41	32	9
With 100 employees and over.....do....	19	18	1	65	57	8	16	14	2
Wells producing during December 1963, total....do....	69,682	66,175	3,507	202,571	185,083	17,488	14,712	13,830	882
Oil wells <sup>1</sup> .....do....	63,458	61,428	2,030	183,782	175,634	8,148	12,472	12,114	358
Gas wells <sup>1</sup> .....do....	6,224	4,747	1,477	18,789	9,449	9,340	2,240	1,716	524
Crude petroleum, field condensate, and drips shipped or used.....1,000 barrels..	197,737	191,634	6,103	954,316	909,999	44,317	142,366	137,488	4,878
Natural gas produced.....million cu. ft..	1,203,610	803,871	399,739	6,924,517	4,166,857	2,757,660	1,464,927	1,182,531	282,396
Natural gas shipped.....do....	1,108,093	723,923	384,170	5,865,624	3,261,255	2,604,369	1,027,289	827,352	199,937
Value of shipments and receipts, total.....\$1,000..	705,537	631,994	73,543	3,574,444	3,099,017	475,427	607,259	558,488	48,771
Crude petroleum, field condensate, drips.....do....	553,954	536,671	17,283	2,805,356	2,677,690	127,666	439,998	424,993	15,005
Natural gas.....do....	146,010	90,000	56,010	745,360	401,816	343,544	163,375	129,685	33,690
Amount received or due for services.....do....	5,562	5,312	250	13,958	13,312	646	3,181	3,105	76
Products purchased and resold without further processing.....do....	11	11	-	9,770	6,199	3,571	705	705	-
Value added in mining.....do....	627,365	561,007	66,358	3,266,993	2,821,202	445,791	548,556	505,653	42,903
Persons in industry, total.....number..	19,720	18,919	801	60,705	53,573	7,132	14,832	13,030	1,802
Production, development, and exploration workers, average for the year.....do....	9,822	9,428	394	25,967	23,082	2,885	4,238	3,694	544
March.....do....	9,829	9,437	392	26,353	23,371	2,982	4,318	3,742	576
May.....do....	9,883	9,495	388	25,868	22,999	2,869	4,198	3,678	520
August.....do....	9,956	9,558	398	26,126	23,242	2,884	4,314	3,759	555
November.....do....	9,591	9,191	400	25,471	22,658	2,813	4,108	3,577	531
All other employees.....do....	8,803	8,496	307	28,144	24,345	3,801	10,532	9,309	1,223
Proprietors and firm members.....do....	1,095	995	100	6,594	6,148	446	62	27	35
Performing manual labor.....do....	771	695	76	2,221	1,961	260	119	106	13
Man-hours worked by production, development, and exploration workers, total.....1,000..	18,694	17,846	848	52,336	46,458	5,878	8,693	7,541	1,152
Operating and maintaining wells.....do....	15,453	14,833	620	42,397	37,973	4,424	7,011	6,279	732
Drilling wells and rig building.....do....	1,421	1,373	48	3,521	3,171	350	390	313	77
Exploration work (except drilling).....do....	1,529	1,415	114	4,695	3,903	792	952	657	295
Other work.....do....	291	225	66	1,723	1,411	312	340	292	48
Principal expenses designated below, total...\$1,000..	340,296	321,218	19,078	1,274,825	1,121,595	153,230	264,768	240,653	24,115
Wages of production, development, and exploration workers.....do....	51,580	49,485	2,095	156,948	138,912	18,036	29,291	25,109	4,182
Salaries of all other employees.....do....	75,192	72,578	2,614	242,120	212,246	29,874	99,636	89,055	10,581
Supplies <sup>2</sup> .....do....	86,534	81,817	4,717	344,485	301,439	43,046	55,981	51,622	4,359
Purchases for resale.....do....	16	16	-	4,846	4,337	509	-	-	-
Fuels purchased.....do....	5,201	5,006	195	19,464	16,808	2,656	1,547	1,427	120
Electric energy purchased.....do....	7,435	7,086	349	27,164	25,738	1,426	1,547	1,516	31
Contract work.....do....	114,338	105,230	9,108	479,798	422,115	57,683	76,766	71,924	4,842
Purchased machinery installed.....do....	40,674	39,054	1,620	139,829	126,419	13,410	20,570	19,193	1,377
Capital expenditures, total.....do....	176,026	167,222	8,804	708,135	619,041	89,094	97,708	92,847	4,861
Development and exploration of mineral property.....do....	96,681	90,033	6,648	372,895	317,988	54,907	58,963	57,218	1,745
New structures and additions.....do....	15,998	15,315	683	85,698	73,296	12,402	10,570	9,772	798
New machinery and equipment.....do....	57,223	55,815	1,408	191,309	170,920	20,389	26,558	24,306	2,252
Used plant and equipment.....do....	6,124	6,059	65	58,233	56,837	1,396	1,617	1,551	66
Energy used.....million kwh. equivalent..	11,031	10,737	294	50,506	42,421	8,085	8,888	8,227	661
Fuels produced and used for fuel at establishment:									
Crude petroleum.....1,000 barrels..	1	1	-	98	98	-	5	5	-
Natural gas.....million cu. ft..	21,591	20,928	663	121,606	103,894	17,712	26,808	24,929	1,879
Fuels purchased:									
Distillate fuel oil.....1,000 barrels..	61	55	6	305	219	86	20	20	(2)
Residual fuel oil.....do....	5	5	-	166	155	11	5	4	1
Gas.....million cu. ft..	10,410	10,299	111	25,208	18,064	7,144	893	648	245
Gasoline.....1,000 gallons..	5,682	5,281	401	25,611	22,918	2,693	2,975	2,851	124
Other fuels.....\$1,000..	445	433	12	3,390	3,140	250	427	426	1
Undistributed.....do....	853	839	14	2,358	2,302	56	-	-	-
Electric energy purchased.....million kw.- hrs..	548	523	25	2,009	1,910	99	100	99	1
Electric energy generated and used.....do....	8	8	-	55	51	4	9	8	1
Wells drilled and completed, except those drilled on contract for others:									
Drilled.....number..	4,138	3,811	327	12,616	11,326	1,290	1,146	1,068	78
Footage of wells drilled.....1,000 ft..	16,549	14,922	1,627	59,752	52,133	7,619	7,286	6,648	638
Cost of drilling and equipping wells.....\$1,000..	170,390	158,475	11,915	626,844	540,607	86,237	97,286	90,473	6,813
Wells drilled and completed on contract for others:									
Drilled.....number..	211	208	3	804	710	94	39	23	16
Footage of wells drilled on contract.....1,000 ft..	580	559	21	2,843	2,447	396	187	119	68
Costs borne by drilling contractor in drilling and equipping wells.....\$1,000..	2,527	2,302	225	8,157	7,226	931	526	268	258
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	1,439	1,360	79	5,622	4,938	684	678	574	104
Per production worker.....hp..	147	140	200	216	214	237	160	155	191
Prime movers.....1,000 hp..	1,197	1,125	72	4,218	3,592	626	622	519	103
Electric motors driven by purchased energy.....do....	242	235	7	1,404	1,346	58	56	55	1
Horsepower rating of electric motors driven by energy generated at same establishment.....do....	6	4	2	38	36	2	3	3	(2)

See footnotes at end of table.

**TABLE 3A. Detailed Statistics for Selected Geographic Areas: 1963—Continued**

Item	West South Central--Continued											
	Texas Gulf Coast B			South Texas			Southwest Texas			North Central Texas A		
	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry
Establishments, total.....number..	291	157	134	331	222	109	277	246	31	797	764	33
With 0 to 19 employees.....do....	272	147	125	299	204	95	268	238	30	764	733	31
With 20 to 99 employees.....do....	19	10	9	25	13	12	7	6	1	31	29	2
With 100 employees and over.....do....	-	-	-	7	5	2	2	2	-	2	2	-
Wells producing during December 1963, total.....do....	7,295	4,816	2,479	12,111	9,798	2,313	10,193	9,558	635	30,279	29,209	1,070
Oil wells <sup>1</sup> .....do....	5,286	4,027	1,259	9,334	8,368	966	9,838	9,483	355	29,310	28,872	438
Gas wells <sup>1</sup> .....do....	2,009	789	1,220	2,777	1,430	1,347	355	75	280	969	337	632
Crude petroleum, field condensate, and drips shipped or used.....1,000 barrels..	48,126	35,102	13,024	74,109	65,760	8,349	19,332	16,945	2,387	62,341	60,228	2,113
Natural gas produced.....million cu. ft..	798,482	313,326	485,156	1,380,162	883,088	497,074	126,419	27,064	99,355	133,392	63,058	70,334
Natural gas shipped.....do....	753,878	274,775	479,103	1,044,920	565,537	479,383	121,939	23,128	98,811	119,018	49,755	69,263
Value of shipments and receipts, total.....\$1,000..	251,476	148,511	102,965	360,235	274,486	85,749	72,023	51,653	20,370	200,975	184,855	16,120
Crude petroleum, field condensate, drips.....do....	146,626	108,520	38,106	225,537	201,553	23,984	55,405	48,738	6,667	183,314	177,269	6,045
Natural gas.....do....	100,851	39,789	61,062	133,816	72,077	61,739	16,444	2,759	13,685	15,297	5,246	10,051
Amount received or due for services.....do....	428	202	226	882	856	26	148	130	18	1,485	1,461	24
Products purchased and resold without further processing.....do....	3,571	-	3,571	-	-	-	26	26	-	879	879	-
Value added in mining.....do....	233,156	141,071	92,085	342,667	259,373	83,294	64,189	43,547	20,642	177,939	161,995	15,944
Persons in industry, total.....number..	1,761	1,023	738	4,172	3,102	1,070	1,456	1,337	119	4,667	4,472	195
Production, development, and exploration workers, average for the year.....do....	1,191	702	489	2,256	1,717	539	777	694	83	2,792	2,703	89
March.....do....	1,222	723	499	2,298	1,748	550	773	690	83	2,738	2,646	92
May.....do....	1,204	706	498	2,222	1,685	537	783	701	82	2,698	2,605	93
August.....do....	1,184	699	485	2,272	1,728	544	787	703	84	2,783	2,688	95
November.....do....	1,148	676	472	2,228	1,702	526	757	673	84	2,717	2,637	80
All other employees.....do....	417	234	183	1,678	1,208	470	493	468	25	1,091	1,005	86
Proprietors and firm members.....do....	163	87	66	238	177	61	186	175	11	784	764	20
Performing manual labor.....do....	85	53	32	141	99	42	121	114	7	481	472	9
Man-hours worked by production, development, and exploration workers, total.....1,000..	2,427	1,465	962	4,530	3,496	1,034	1,543	1,378	165	5,698	5,517	181
Operating and maintaining wells.....do....	2,156	1,293	863	3,645	2,820	825	1,195	1,080	115	4,708	4,568	140
Drilling wells and rig building.....do....	57	40	17	264	226	38	108	108	-	524	486	38
Exploration work (except drilling).....do....	161	86	75	383	269	114	230	186	44	340	340	-
Other work.....do....	53	46	7	238	181	57	10	4	6	126	123	3
Principal expenses designated below, total...\$1,000..	62,222	32,680	29,542	123,854	94,419	29,435	26,033	21,661	4,372	80,280	73,067	7,213
Wages of production, development, and exploration workers.....do....	7,553	4,548	3,005	14,561	11,186	3,375	4,259	3,782	477	13,282	12,796	486
Salaries of all other employees.....do....	3,071	1,626	1,445	14,500	10,612	3,888	3,551	3,430	121	7,289	6,437	852
Supplies <sup>2</sup> .....do....	22,390	10,234	12,156	37,364	27,971	9,393	5,544	4,296	1,248	23,369	21,069	2,300
Purchases for resale.....do....	-	-	-	-	-	-	21	21	-	-	-	-
Fuels purchased.....do....	1,787	664	1,123	1,000	717	283	553	538	15	2,595	2,513	82
Electric energy purchased.....do....	359	230	129	1,261	1,144	117	1,744	1,599	145	3,971	3,950	21
Contract work.....do....	27,062	15,378	11,684	55,168	42,789	12,379	10,361	7,995	2,366	29,774	26,302	3,472
Purchased machinery installed.....do....	5,900	3,322	2,578	10,695	7,683	3,012	1,531	1,232	299	10,697	10,211	486
Capital expenditures, total.....do....	39,178	22,388	16,790	87,920	65,191	22,729	11,920	7,575	4,345	47,370	41,185	6,185
Development and exploration of mineral property.....do....	23,939	12,678	11,261	45,526	29,373	16,153	7,320	3,941	3,379	20,011	18,798	1,213
New structures and additions.....do....	3,244	1,966	1,278	15,461	13,477	1,984	1,090	1,038	52	8,323	3,903	4,420
New machinery and equipment.....do....	11,183	7,024	4,159	25,940	21,688	4,252	2,673	1,768	905	13,020	12,484	536
Used plant and equipment.....do....	812	720	92	993	653	340	837	828	9	6,016	6,000	16
Energy used.....million kwh. equivalent..	6,382	2,489	3,893	3,997	3,113	884	860	512	348	3,113	2,992	121
Fuels produced and used for fuel at establishment:	-	-	-	-	-	-	-	-	-	49	49	-
Crude petroleum.....1,000 barrels..	-	-	-	-	-	-	-	-	-	-	-	-
Natural gas.....million cu. ft..	14,114	7,590	6,524	10,612	8,314	2,298	1,890	818	1,072	4,044	3,707	337
Fuels purchased:	-	-	-	-	-	-	-	-	-	-	-	-
Distillate fuel oil.....1,000 barrels..	1	1	(2)	1	1	(2)	1	1	-	9	9	-
Residual fuel oil.....do....	2	(2)	2	10	2	8	(2)	(2)	-	142	142	-
Gas.....million cu. ft..	6,196	186	6,010	1,639	1,220	419	102	89	13	2,788	2,778	10
Gasoline.....1,000 gallons..	2,140	1,571	569	1,951	1,229	722	1,412	1,365	47	1,193	1,015	178
Other fuels.....\$1,000..	119	117	2	125	112	13	11	11	-	567	535	32
Undistributed.....do....	17	-	17	55	55	-	100	100	-	689	689	-
Electric energy purchased.....million kwh..	15	10	5	94	90	4	168	155	13	303	302	1
Electric energy generated and used.....do....	3	3	-	13	10	3	-	-	-	4	4	(2)
Wells drilled and completed, except those drilled on contract for others:	-	-	-	-	-	-	-	-	-	-	-	-
Drilled.....number..	628	390	238	1,126	891	235	614	537	77	2,574	2,460	114
Footage of wells drilled.....1,000 ft..	3,817	2,078	1,739	6,688	5,254	1,434	1,929	1,620	309	7,376	6,775	601
Cost of drilling and equipping wells.....\$1,000..	37,525	19,329	18,196	78,181	59,517	18,664	11,386	8,353	3,033	47,181	40,919	6,262
Wells drilled and completed on contract for others:	-	-	-	-	-	-	-	-	-	-	-	-
Drilled.....number..	8	6	2	77	3	74	21	21	-	292	292	-
Footage of wells drilled on contract.....1,000 ft..	37	23	14	320	12	308	2	2	-	579	579	-
Costs borne by drilling contractor in drilling and equipping wells.....\$1,000..	101	54	47	626	50	576	33	33	-	860	860	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	241	134	107	459	323	136	200	177	23	446	419	27
Per production worker.....hp..	202	191	219	203	188	252	257	255	277	160	155	303
Prime movers.....1,000 hp..	230	127	103	424	293	131	128	109	19	333	307	26
Electric motors driven by purchased energy...do....	11	7	4	35	30	5	72	68	4	113	112	1
Horsepower rating of electric motors driven by energy generated at same establishment.....do....	2	2	-	4	3	1	1	(2)	1	2	-	2

See footnotes at end of table.



TABLE 3A. Detailed Statistics for Selected Geographic Areas: 1963—Continued

Item	West South Central—Continued											
	North Central Texas B			East Texas A			East Texas B			West Texas A		
	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry
Establishments, total.....number..	544	512	32	246	222	24	507	442	65	939	892	47
With 0 to 19 employees.....do....	515	484	31	233	210	23	474	415	59	874	828	46
With 20 to 99 employees.....do....	26	25	1	12	11	1	26	20	6	44	43	1
With 100 employees and over.....do....	3	3	-	1	1	-	7	7	-	21	21	-
Wells producing during December 1963, total.....do....	14,391	13,715	676	6,640	6,381	259	24,620	22,935	1,685	55,641	55,124	517
Oil wells <sup>1</sup> .....do....	13,641	13,414	227	6,248	6,156	92	22,829	22,065	764	54,176	53,969	207
Gas wells <sup>1</sup> .....do....	750	301	449	392	225	167	1,791	870	921	1,465	1,155	310
Crude petroleum, field condensate, and drips shipped or used.....1,000 barrels..	40,689	40,294	395	28,112	27,569	543	83,399	79,620	3,779	383,084	382,231	853
Natural gas produced.....million cu. ft..	89,252	56,777	32,475	94,839	62,784	32,055	598,899	293,602	305,297	1,149,229	967,116	182,113
Natural gas shipped.....do....	85,332	54,981	30,351	71,531	39,977	31,554	581,040	280,271	300,769	1,018,861	846,768	172,093
Value of shipments and receipts, total.....\$1,000..	130,325	125,239	5,086	91,087	84,830	6,257	321,859	271,534	50,325	1,202,905	1,179,777	23,128
Crude petroleum, field condensate, drips.....do....	118,554	117,459	1,095	81,140	79,514	1,626	241,459	230,497	10,962	1,105,619	1,104,055	1,564
Natural gas.....do....	9,367	5,400	3,967	9,836	5,209	4,627	78,495	39,187	39,308	93,283	71,729	21,554
Amount received or due for services.....do....	2,404	2,380	24	96	92	4	1,683	1,628	55	647	637	10
Products purchased and resold without further processing.....do....	-	-	-	15	15	-	222	222	-	3,356	3,356	-
Value added in mining.....do....	120,297	115,142	5,155	92,005	86,022	5,983	295,173	247,560	47,613	1,088,931	1,065,622	23,309
Persons in industry, total.....number..	2,879	2,754	125	5,644	5,569	75	4,459	3,979	480	36,482	35,181	1,301
Production, development, and exploration workers, average for the year.....do....	1,874	1,797	77	836	785	51	2,905	2,636	269	6,623	6,548	75
March.....do....	1,903	1,825	78	795	742	53	3,004	2,736	268	6,746	6,657	89
May.....do....	1,933	1,852	81	763	711	52	2,890	2,624	266	6,665	6,593	72
August.....do....	1,839	1,766	73	760	711	49	2,910	2,635	275	6,698	6,630	68
November.....do....	1,821	1,746	75	1,022	972	50	2,803	2,541	262	6,374	6,303	71
All other employees.....do....	1,055	1,019	36	4,684	4,669	15	1,228	1,084	144	6,008	4,821	1,187
Proprietors and firm members.....do....	450	438	12	124	115	9	326	259	67	3,851	3,812	39
Performing manual labor.....do....	284	273	11	86	78	8	179	148	31	482	447	35
Man-hours worked by production, development, and exploration workers, total.....1,000..	3,593	3,460	133	1,619	1,500	119	5,841	5,221	620	13,443	13,301	142
Operating and maintaining wells.....do....	2,795	2,692	103	1,299	1,211	88	4,869	4,428	441	10,651	10,571	80
Drilling wells and rig building.....do....	536	533	3	86	85	1	311	289	22	879	877	2
Exploration work (except drilling).....do....	118	95	23	176	147	29	506	462	44	1,392	1,377	15
Other work.....do....	144	140	4	58	57	1	155	42	113	521	476	45
Principal expenses designated below, total...\$1,000..	46,909	45,282	1,627	71,240	69,255	1,985	76,360	68,126	8,234	387,402	375,221	12,181
Wages of production, development, and exploration workers.....do....	9,232	8,888	344	4,375	4,017	358	16,379	14,907	1,472	42,609	42,255	354
Salaries of all other employees.....do....	3,916	3,773	143	40,623	40,557	66	9,373	8,354	1,019	50,136	41,920	8,216
Supplies <sup>2</sup> .....do....	11,361	10,911	450	9,050	8,633	417	22,009	19,501	2,508	114,855	113,948	907
Purchases for resale.....do....	-	-	-	18	18	-	237	237	-	4,061	4,061	-
Fuels purchased.....do....	1,395	1,374	21	792	764	28	1,801	1,645	156	6,087	6,028	59
Electric energy purchased.....do....	1,950	1,940	10	582	569	13	1,544	1,457	87	10,488	10,413	75
Contract work.....do....	19,055	18,396	659	15,800	14,697	1,103	25,017	22,025	2,992	159,166	156,596	2,570
Purchased machinery installed.....do....	5,753	5,591	162	3,384	3,202	182	10,450	9,516	934	51,541	51,168	373
Capital expenditures, total.....do....	29,486	28,115	1,371	30,544	29,075	1,469	34,372	30,407	3,965	232,224	228,059	4,165
Development and exploration of mineral property.....do....	10,395	9,263	1,132	9,785	8,623	1,162	14,896	13,871	1,025	124,989	122,379	2,610
New structures and additions.....do....	1,847	1,807	40	1,343	1,282	61	4,615	4,133	482	31,379	31,100	279
New machinery and equipment.....do....	6,345	6,153	192	5,618	5,380	238	11,095	8,651	2,444	62,148	61,421	727
Used plant and equipment.....do....	10,899	10,892	7	13,798	13,790	8	3,766	3,752	14	13,708	13,159	549
Energy used.....million kwh. equivalent..	1,498	1,469	29	1,534	1,451	83	3,151	2,585	566	17,083	16,908	175
Fuels produced and used for fuel at establishment:												
Crude petroleum.....1,000 barrels..	-	-	-	-	-	-	-	-	-	44	44	-
Natural gas.....million cu. ft..	3,069	2,986	83	3,598	3,354	244	5,765	4,214	1,551	43,115	42,600	515
Fuels purchased:												
Distillate fuel oil.....1,000 barrels..	42	42	-	75	73	2	18	18	-	31	31	(2)
Residual fuel oil.....do....	(2)	(2)	-	4	4	-	1	1	-	1	1	-
Gas.....million cu. ft..	436	436	-	662	662	-	3,446	3,256	190	6,771	6,771	-
Gasoline.....1,000 gallons..	1,296	1,251	45	347	317	30	1,738	1,580	158	10,366	10,303	63
Other fuels.....\$1,000..	587	586	1	23	21	2	240	179	61	990	949	41
Undistributed.....do....	161	153	8	126	118	8	280	269	11	735	735	-
Electric energy purchased.....million kwh..	119	118	1	37	36	1	94	88	6	807	802	5
Electric energy generated and used.....do....	3	3	(2)	-	-	-	1	1	-	8	8	-
Wells drilled and completed, except those drilled on contract for others:												
Drilled.....number..	1,419	1,336	83	266	235	31	544	459	85	2,849	2,801	48
Footage of wells drilled.....1,000 ft..	4,476	4,168	308	1,476	1,268	208	2,798	2,402	396	16,372	16,115	257
Cost of drilling and equipping wells.....\$1,000..	28,064	26,046	2,018	17,568	15,616	1,952	28,248	23,977	4,271	195,100	192,792	2,308
Wells drilled and completed on contract for others:												
Drilled.....number..	140	140	-	15	15	-	22	22	-	162	162	-
Footage of wells drilled on contract.....1,000 ft..	466	466	-	42	42	-	193	193	-	921	921	-
Costs borne by drilling contractor in drilling and equipping wells.....\$1,000..	1,305	1,305	-	77	77	-	1,029	1,029	-	3,195	3,195	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	338	330	8	217	210	7	499	449	50	1,779	1,760	19
Per production worker.....hp..	180	184	104	260	268	137	172	170	186	269	269	253
Prime movers.....1,000 hp..	261	253	8	148	142	6	380	331	49	1,235	1,216	19
Electric motors driven by purchased energy.....do....	77	77	(2)	69	68	1	119	118	1	544	544	(2)
Horsepower rating of electric motors driven by energy generated at same establishment.....do....	1	1	-	1	1	-	6	6	-	9	9	-

See footnotes at end of table.

TABLE 3A. Detailed Statistics for Selected Geographic Areas: 1963 -Continued

Item	West South Central-Continued						Mountain				
	West Texas B			Texas Panhandle			Division			Montana	
	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry
Establishments, total.....number..	269	250	19	315	196	119	1,109	944	165	158	149
With 0 to 19 employees.....do....	261	243	18	289	181	108	995	854	141	144	137
With 20 to 99 employees.....do....	8	7	1	20	13	7	97	74	23	13	11
With 100 employees and over.....do....	-	-	-	6	2	4	17	16	1	1	1
Wells producing during December 1963, total.....do....	8,080	7,955	125	18,609	11,762	6,847	35,404	28,265	7,139	4,316	3,441
Oil wells <sup>1</sup> .....do....	7,670	7,640	30	12,978	9,526	3,452	27,154	26,533	621	3,382	3,377
Gas wells <sup>1</sup> .....do....	410	315	95	5,631	2,236	3,395	8,250	1,732	6,518	934	64
Crude petroleum, field condensate, and drips shipped or used.....1,000 barrels..	36,144	35,966	178	36,614	28,796	7,818	343,385	337,234	6,151	29,380	29,370
Natural gas produced.....million cu. ft..	165,192	119,808	45,384	923,724	197,703	726,021	1,264,270	695,274	568,996	25,519	8,520
Natural gas shipped.....do....	151,387	106,130	45,257	890,429	192,581	697,848	1,134,918	575,428	559,490	21,653	4,721
Value of shipments and receipts, total.....\$1,000..	118,379	113,079	5,300	217,921	106,565	111,356	1,062,182	973,566	88,616	73,930	72,752
Crude petroleum, field condensate, drips.....do....	102,167	101,712	455	105,537	83,380	22,157	915,992	900,025	15,967	72,005	71,976
Natural gas.....do....	14,836	9,991	4,845	109,760	20,744	89,016	140,001	68,640	71,361	1,773	624
Amount received or due for services.....do....	536	536	-	2,468	2,285	183	3,020	2,229	791	151	151
Products purchased and resold without further processing.....do....	840	840	-	156	156	-	3,169	2,672	497	1	1
Value added in mining.....do....	105,117	100,397	4,720	198,963	94,820	104,143	969,292	886,701	82,591	59,045	58,092
Persons in industry, total.....number..	1,109	1,057	52	3,244	2,069	1,175	11,993	9,823	2,170	1,161	1,039
Production, development, and exploration workers, average for the year.....do....	715	688	27	1,760	1,118	642	6,610	5,214	1,396	667	559
March.....do....	692	669	23	1,786	1,134	652	6,724	5,319	1,405	659	551
May.....do....	695	672	23	1,738	1,113	625	6,564	5,154	1,410	688	580
August.....do....	733	709	24	1,764	1,155	609	6,706	5,296	1,410	675	567
November.....do....	751	712	29	1,652	1,060	592	6,432	5,062	1,370	644	536
All other employees.....do....	200	192	8	1,258	834	424	4,886	4,185	701	443	431
Proprietors and firm members.....do....	194	177	17	226	117	109	497	424	73	51	49
Performing manual labor.....do....	104	91	13	139	80	59	312	279	33	46	44
Man-hours worked by production, development, and exploration workers, total.....1,000..	1,388	1,332	56	3,561	2,247	1,314	13,194	10,471	2,723	1,301	1,110
Operating and maintaining wells.....do....	1,196	1,155	41	2,872	1,876	996	9,386	7,371	2,015	802	626
Drilling wells and rig building.....do....	91	91	-	275	123	152	763	569	194	12	12
Exploration work (except drilling).....do....	93	78	15	344	206	138	2,693	2,280	413	419	415
Other work.....do....	8	8	-	70	42	28	352	251	101	68	57
Principal expenses designated below, total..\$1,000..	53,713	51,059	2,654	82,044	50,174	31,870	370,763	319,186	51,577	37,543	36,176
Wages of production, development, and exploration workers.....do....	4,281	4,130	151	11,126	7,294	3,832	44,706	36,507	8,199	4,230	3,639
Salaries of all other employees.....do....	1,537	1,514	43	8,468	4,970	3,498	41,260	36,570	4,690	3,557	3,501
Supplies <sup>2</sup> .....do....	17,502	16,974	528	25,060	16,280	8,780	100,291	86,454	13,837	9,269	9,032
Purchases for resale.....do....	-	-	-	509	-	509	2,523	2,523	-	1	1
Fuels purchased.....do....	555	537	18	1,352	601	751	4,076	3,488	588	425	410
Electric energy purchased.....do....	1,629	1,616	13	2,089	1,304	785	10,870	10,773	97	837	836
Contract work.....do....	28,189	26,288	1,901	33,440	19,725	13,715	167,037	142,871	24,166	19,224	18,757
Purchased machinery installed.....do....	8,194	8,092	102	11,114	7,209	3,905	60,712	54,272	6,440	9,608	9,527
Capital expenditures, total.....do....	42,807	40,825	1,982	54,606	33,374	21,232	252,619	213,516	39,103	24,479	23,903
Development and exploration of mineral property.....do....	24,940	24,502	438	32,131	17,342	14,789	145,763	122,872	22,891	18,820	18,485
New structures and additions.....do....	3,898	2,426	1,472	3,928	2,392	1,536	32,051	22,553	9,498	2,040	1,932
New machinery and equipment.....do....	9,400	9,351	49	17,329	12,694	4,635	60,594	54,462	6,132	3,186	3,059
Used plant and equipment.....do....	4,569	4,546	23	1,218	946	272	14,211	13,629	582	433	427
Energy used.....million kwh. equivalent..	1,590	1,543	47	2,410	1,132	1,278	13,246	12,494	752	1,145	1,136
Fuels produced and used for fuel at establishment:											
Crude petroleum.....1,000 barrels..	-	-	-	-	-	-	90	87	3	1	1
Natural gas.....million cu. ft..	3,615	3,490	125	4,976	1,892	3,084	32,692	31,892	800	2,907	2,887
Fuels purchased:											
Distillate fuel oil.....1,000 barrels..	8	8	(2)	99	15	84	9	8	1	(2)	(2)
Residual fuel oil.....do....	1	1	-	(2)	-	(2)	65	58	7	1	1
Gas.....million cu. ft..	872	852	20	1,403	1,166	237	5,263	3,868	1,395	359	359
Gasoline.....1,000 gallons..	666	631	35	1,517	805	712	6,214	5,216	998	462	419
Other fuels.....\$1,000..	93	91	2	208	113	95	760	699	61	171	171
Undistributed.....do....	123	120	3	72	63	9	256	250	6	51	47
Electric energy purchased.....million kwh..	117	117	(2)	155	93	62	806	802	4	65	65
Electric energy generated and used.....do....	13	13	-	1	1	(2)	19	16	3	2	2
Wells drilled and completed, except those drilled on contract for others:											
Drilled.....number..	573	560	13	877	589	288	3,170	2,675	495	323	315
Footage of wells drilled.....1,000 ft..	3,063	2,989	74	4,471	2,816	1,655	16,642	13,998	2,644	1,939	1,907
Cost of drilling and equipping wells.....\$1,000..	34,530	32,224	2,306	51,775	31,361	20,414	210,815	175,621	35,194	23,938	23,556
Wells drilled and completed on contract for others:											
Drilled.....number..	11	11	-	17	15	2	81	58	23	-	-
Footage of wells drilled on contract.....1,000 ft..	43	43	-	53	47	6	363	300	63	-	-
Costs borne by drilling contractor in drilling and equipping wells.....\$1,000..	242	242	-	163	113	50	1,943	1,347	596	-	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	296	290	6	469	272	197	1,281	1,113	168	123	120
Per production worker.....hp..	414	421	222	266	243	307	194	213	120	184	210
Prime movers.....1,000 hp..	113	108	5	344	187	157	955	797	158	105	101
Electric motors driven by purchased energy.....do....	183	182	1	125	85	40	326	316	10	18	18
Horsepower rating of electric motors driven by energy generated at same establishment.....do....	7	7	-	2	2	-	10	9	1	1	-

See footnotes at end of table.



TABLE 3A. Detailed Statistics for Selected Geographic Areas: 1963—Continued

Item	Mountain—Continued											
	Wyoming			Colorado			New Mexico, total			East New Mexico		
	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry
Establishments, total.....number..	205	195	10	237	199	38	420	335	85	309	287	22
With 0 to 19 employees.....do....	179	172	7	212	183	9	379	302	77	279	259	20
With 20 to 99 employees.....do....	20	17	3	23	14	9	34	27	7	24	22	2
With 100 employees and over.....do....	6	6	-	2	2	-	7	6	1	6	6	-
Wells producing during December 1963, total.....do....	7,327	6,875	452	2,425	1,981	444	20,306	15,104	5,202	13,418	13,176	242
Oil wells <sup>1</sup> .....do....	6,623	6,520	103	1,850	1,803	47	14,437	13,989	448	12,403	12,268	135
Gas wells <sup>1</sup> .....do....	704	355	349	575	178	397	5,869	1,115	4,754	1,015	908	107
Crude petroleum, field condensate, and drips shipped or used.....1,000 barrels..	133,482	131,854	1,628	37,940	37,575	365	109,282	105,394	3,888	97,876	96,979	897
Natural gas produced.....million cu. ft..	230,711	150,991	79,720	134,444	84,591	49,853	780,284	396,757	383,527	405,661	377,379	28,282
Natural gas shipped.....do....	201,735	122,435	79,300	83,983	39,265	44,718	756,165	377,587	378,578	388,396	360,440	27,956
Value of shipments and receipts, total.....\$1,000..	364,782	348,714	16,068	119,650	113,205	6,445	401,682	343,329	58,353	324,620	318,216	6,404
Crude petroleum, field condensate, drips.....do....	334,740	330,264	4,476	108,387	107,451	936	311,969	302,115	9,854	281,944	279,422	2,522
Natural gas.....do....	29,095	18,151	10,944	10,239	4,733	5,506	87,847	39,956	47,891	41,649	37,810	3,839
Amount received or due for services.....do....	777	129	648	569	566	3	1,369	1,258	111	1,027	984	43
Products purchased and resold without further processing.....do....	170	170	-	455	455	-	497	-	497	-	-	-
Value added in mining.....do....	334,324	318,552	15,772	109,921	103,584	6,337	376,268	322,134	54,134	302,511	296,910	5,601
Persons in industry, total.....number..	2,990	2,865	125	2,839	2,396	443	4,442	3,068	1,374	2,885	2,768	117
Production, development, and exploration workers, average for the year.....do....	1,775	1,693	82	1,108	859	249	2,752	1,863	889	1,824	1,732	92
March.....do....	1,779	1,700	79	1,132	878	254	2,819	1,933	886	1,894	1,802	92
May.....do....	1,725	1,644	81	1,079	826	253	2,748	1,861	887	1,818	1,726	92
August.....do....	1,826	1,745	81	1,132	873	259	2,760	1,860	900	1,820	1,728	92
November.....do....	1,763	1,674	89	1,089	854	235	2,675	1,791	884	1,759	1,667	92
All other employees.....do....	1,143	1,104	39	1,594	1,418	176	1,463	1,023	440	893	881	12
Proprietors and firm members.....do....	72	68	4	137	119	18	227	182	45	168	155	13
Performing manual labor.....do....	40	40	-	87	77	10	132	114	18	94	89	5
Man-hours worked by production, development, and exploration workers, total.....1,000..	3,591	3,415	176	2,229	1,752	477	5,465	3,726	1,739	3,581	3,435	146
Operating and maintaining wells.....do....	2,680	2,582	98	1,156	1,009	147	4,375	2,848	1,527	2,852	2,713	139
Drilling wells and rig building.....do....	139	93	46	134	91	43	405	331	74	318	318	-
Exploration work (except drilling).....do....	744	713	31	811	599	212	558	433	125	326	325	1
Other work.....do....	28	27	1	128	53	75	127	114	13	85	79	6
Principal expenses designated below, total...\$1,000..	98,577	92,007	6,570	49,362	43,629	5,733	146,495	113,281	33,214	104,134	101,624	2,510
Wages of production, development, and exploration workers.....do....	13,153	12,550	603	8,319	6,619	1,700	16,890	11,988	4,902	11,635	11,125	510
Salaries of all other employees.....do....	10,238	9,965	273	14,512	13,126	1,386	11,013	8,280	2,733	7,387	7,301	86
Supplies <sup>2</sup> .....do....	27,326	25,362	1,964	8,940	7,669	1,271	42,164	33,279	8,885	30,139	29,278	861
Purchases for resale.....do....	171	171	-	298	298	-	-	-	-	-	-	-
Fuels purchased.....do....	1,528	1,475	53	475	418	57	1,506	1,088	418	1,100	1,002	98
Electric energy purchased.....do....	4,915	4,898	17	1,108	1,104	4	3,030	2,975	55	2,795	2,783	12
Contract work.....do....	41,246	37,586	3,660	15,710	14,395	1,315	71,892	55,671	16,221	51,078	50,135	943
Purchased machinery installed.....do....	19,111	18,577	534	5,815	5,346	469	18,621	14,462	4,159	12,428	12,409	19
Capital expenditures, total.....do....	63,839	57,907	5,932	22,617	19,609	3,008	111,799	86,280	25,519	75,431	74,301	1,130
Development and exploration of mineral property.....do....	38,267	33,949	4,318	11,190	9,587	1,603	61,486	47,208	14,278	43,889	43,319	570
New structures and additions.....do....	5,941	4,570	1,371	5,595	4,666	929	16,295	9,381	6,914	4,374	3,937	437
New machinery and equipment.....do....	14,604	14,361	243	5,476	5,012	464	25,818	22,052	3,766	19,582	19,470	112
Used plant and equipment.....do....	5,027	5,027	-	356	344	12	8,200	7,639	561	7,586	7,575	11
Energy used.....million kwh. equivalent..	4,644	4,625	19	2,284	2,252	32	4,221	3,549	672	3,451	3,329	122
Fuels produced and used for fuel at establishment:												
Crude petroleum.....1,000 barrels..	79	79	-	1	1	-	6	3	3	-	-	-
Natural gas.....million cu. ft..	10,387	10,377	10	6,375	6,360	15	10,320	9,587	733	8,984	8,967	17
Fuels purchased:												
Distillate fuel oil.....1,000 barrels..	6	6	(Z)	1	1	(Z)	2	1	1	1	1	-
Residual fuel oil.....do....	59	55	4	3	(Z)	3	(Z)	(Z)	-	(Z)	(Z)	-
Gas.....million cu. ft..	2,173	2,163	10	623	570	53	2,064	742	1,322	1,083	731	352
Gasoline.....1,000 gallons..	1,726	1,607	119	895	773	122	2,852	2,181	671	2,023	1,966	57
Other fuels.....do....	286	284	2	58	53	5	200	173	27	200	173	27
Undistributed.....do....	57	57	-	-	-	-	146	146	-	146	146	-
Electric energy purchased.....million kwh..	380	379	1	75	75	(Z)	209	207	2	194	194	(Z)
Electric energy generated and used.....do....	10	9	1	1	(Z)	1	4	3	1	-	2,140	-
Wells drilled and completed, except those drilled on contract for others:												
Drilled.....number..	892	798	94	522	464	58	1,206	913	293	752	745	7
Footage of wells drilled.....1,000 ft..	4,427	4,053	374	2,634	2,313	321	6,455	4,768	1,687	4,284	4,236	48
Cost of drilling and equipping wells.....\$1,000..	54,494	49,291	5,203	18,866	15,320	3,546	91,495	68,991	22,504	64,472	63,376	1,096
Wells drilled and completed on contract for others:												
Drilled.....number..	26	4	22	30	30	-	25	24	1	23	23	-
Footage of wells drilled on contract.....1,000 ft..	65	8	57	146	146	-	152	146	6	140	140	-
Costs borne by drilling contractor in drilling and equipping wells.....\$1,000..	557	18	539	336	336	-	1,050	993	57	896	896	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	403	380	23	184	161	23	491	380	111	360	343	17
Per production worker.....hp..	227	224	280	166	187	93	178	204	125	197	198	185
Prime movers.....1,000 hp..	256	241	15	147	124	23	395	286	109	271	255	16
Electric motors driven by purchased energy.....do....	147	139	8	37	37	(Z)	96	94	2	89	88	1
Horsepower rating of electric motors driven by energy generated at same establishment.....do....	4	4	-	1	1	(Z)	2	1	1	1	1	-

See footnotes at end of table.

TABLE 3A. Detailed Statistics for Selected Geographic Areas: 1963—Continued

Item	Mountain—Continued						Pacific				
	West New Mexico			Utah			Division			California	Alaska
	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry	Industry	Crude petroleum sub-industry	Natural gas sub-industry		
Establishments, total.....number..	111	48	63	68	49	19	524	482	42	492	17
With 0 to 19 employees.....do....	100	43	57	60	43	17	473	436	37	447	13
With 20 to 99 employees.....do....	10	5	5	7	5	2	32	29	3	26	4
With 100 employees and over.....do....	1	-	1	1	1	-	19	17	2	19	-
Wells producing during December 1963, total.....do....	6,888	1,928	4,960	1,012	857	155	40,103	39,348	755	40,036	65
Oil wells.....do....	2,034	1,721	313	855	838	17	39,089	38,756	333	39,033	54
Gas wells.....do....	4,854	207	4,647	157	19	138	1,014	592	422	1,003	11
Crude petroleum, field condensate, and drips shipped or used.....1,000 barrels..	11,406	8,415	2,991	33,162	32,909	253	319,790	317,260	2,530	(D)	(D)
Natural gas produced.....million cu. ft..	374,623	19,378	355,245	92,238	354,415	38,897	880,202	732,817	147,385	(D)	(D)
Natural gas shipped.....do....	367,769	17,147	350,622	70,317	31,420	38,897	579,466	438,563	140,903	(D)	(D)
Value of shipments and receipts, total.....\$1,000..	77,062	25,113	51,949	101,568	95,298	6,270	988,943	941,582	47,361	(D)	(D)
Crude petroleum, field condensate, drips.....do....	30,025	22,693	7,332	88,653	88,000	653	795,321	789,397	5,924	(D)	(D)
Natural gas.....do....	46,198	2,146	44,052	10,764	5,176	5,588	189,338	148,324	41,014	(D)	(D)
Amount received or due for services.....do....	342	274	68	105	76	29	3,954	3,531	423	3,026	(D)
Products purchased and resold without further processing.....do....	497	-	497	2,046	2,046	-	330	330	-	330	-
Value added in mining.....do....	73,757	25,224	48,533	89,295	84,147	5,148	914,019	874,318	39,701	885,899	29,959
Persons in industry, total.....number..	1,557	300	1,257	543	441	102	13,793	13,107	686	13,398	257
Production, development, and exploration workers, average for the year.....do....	928	131	797	298	232	66	8,584	8,163	421	8,342	179
March.....do....	925	131	794	326	250	76	8,567	8,327	240	8,259	263
May.....do....	930	135	795	314	235	79	8,560	8,311	249	8,366	135
August.....do....	940	132	808	302	242	60	8,870	8,611	259	8,627	160
November.....do....	916	124	792	250	198	52	8,312	8,065	247	8,092	154
All other employees.....do....	570	142	428	235	203	32	4,959	4,754	205	4,813	78
Proprietors and firm members.....do....	59	27	32	10	6	4	250	190	60	243	-
Performing manual labor.....do....	38	25	13	7	4	3	172	138	34	165	-
Man-hours worked by production, development, and exploration workers, total.....1,000..	1,884	291	1,593	594	458	136	16,740	15,875	865	16,294	334
Operating and maintaining wells.....do....	1,523	135	1,388	370	306	64	13,676	12,983	693	13,524	149
Drilling wells and rig building.....do....	87	13	74	67	36	31	1,266	1,246	20	1,248	17
Exploration work (except drilling).....do....	232	108	124	156	116	40	1,285	1,179	106	1,013	164
Other work.....do....	42	35	7	1	-	1	513	467	46	509	4
Principal expenses designated below, total.....\$1,000..	42,361	11,657	30,704	36,723	32,172	4,551	374,100	356,984	17,116	(D)	(D)
Wages: production, development, exploration.....do....	5,255	863	4,392	2,063	1,671	392	63,430	60,558	2,872	60,848	1,994
Salaries of all other employees.....do....	3,626	979	2,647	1,896	1,659	237	45,511	43,768	1,743	43,752	1,157
Supplies.....do....	12,025	4,001	8,024	11,973	10,506	1,467	101,609	97,087	4,522	(D)	(D)
Purchases for resale.....do....	-	-	-	2,053	2,053	-	326	326	-	326	-
Fuels purchased.....do....	406	86	320	136	92	44	3,557	3,363	194	3,155	350
Electric energy purchased.....do....	235	192	43	980	960	20	10,292	10,167	125	10,248	40
Contract work.....do....	20,814	5,536	15,278	17,622	15,231	2,391	149,375	141,715	7,660	118,289	29,081
Purchased machinery installed.....do....	6,193	2,053	4,140	7,464	6,290	1,174	23,528	22,747	781	22,810	708
Capital expenditures, total.....do....	36,368	11,979	24,389	27,955	23,981	3,974	213,763	208,141	5,622	182,020	30,845
Development, exploration of mineral property.....do....	17,597	3,889	13,708	14,239	11,976	2,263	176,944	174,220	2,724	147,566	28,504
New structures and additions.....do....	11,921	5,444	6,477	2,156	1,980	176	9,207	8,555	652	8,416	791
New machinery and equipment.....do....	6,236	2,582	3,654	11,417	9,885	1,532	21,816	19,673	2,143	20,375	1,418
Used plant and equipment.....do....	614	64	550	143	140	3	5,796	5,693	103	5,663	132
Energy used.....million kwh. equivalent..	770	220	550	945	926	19	18,390	18,260	130	18,280	98
Fuels produced and used for fuel at establishment:											
Crude petroleum.....1,000 barrels..	6	3	3	-	-	-	249	249	-	249	-
Natural gas.....million cu. ft..	1,336	620	716	2,699	2,678	21	51,413	51,132	281	51,403	10
Fuels purchased:											
Distillate fuel oil.....1,000 barrels..	1	-	1	(Z)	(Z)	-	108	104	4	55	53
Residual fuel oil.....do....	-	-	-	2	2	-	15	15	-	15	-
Gas.....million cu. ft..	981	11	970	44	34	10	2,261	2,261	-	2,261	-
Gasoline.....1,000 gallons..	829	215	614	259	219	40	5,659	5,141	518	5,590	57
Other fuels.....\$1,000..	-	-	-	44	17	27	696	694	2	696	-
Undistributed.....do....	-	-	-	2	-	2	56	20	36	7	-
Electric energy purchased.....million kwh..	15	13	2	76	75	1	850	842	8	848	(Z)
Electric energy generated and used.....do....	-	2,683	-	2	2	-	66	66	-	66	-
Wells drilled, completed, exc. on contract for others:											
Drilled.....number..	454	168	286	207	166	41	2,731	2,543	188	2,702	23
Footage of wells drilled.....1,000 ft..	2,171	532	1,639	(D)	(D)	(D)	9,254	8,132	1,122	9,008	(D)
Cost of drilling and equipping wells.....\$1,000..	27,023	5,615	21,408	(D)	(D)	(D)	169,009	156,049	12,960	144,988	(D)
Wells drilled and completed on contract for others:											
Drilled.....number..	2	1	1	-	-	-	45	45	-	45	-
Footage of wells drilled on contract.....1,000 ft..	12	6	6	-	-	-	171	171	-	171	-
Costs borne by drilling contractor in drilling and equipping wells.....\$1,000..	154	97	57	-	-	-	1,434	1,434	-	1,434	-
Horsepower rating of power equipment, total.....1,000 hp..	131	38	93	78	70	8	1,573	1,514	59	1,545	22
Per production worker.....hp..	141	290	117	262	302	121	183	185	140	185	123
Prime movers.....1,000 hp..	124	32	92	50	42	8	1,265	1,209	56	1,239	20
Electric motors driven by purchased energy.....do....	7	6	1	28	28	(Z)	308	305	3	306	2
Horsepower rating of electric motors driven by energy generated at same establishment.....do....	1	(Z)	1	2	2	(Z)	27	27	(Z)	27	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

(Z) Less than one-half of the unit of measure specified.

For wells that produced both oil and gas, respondents were requested to classify the wells according to the more valuable total product; classifying "distillate" wells as oil wells if the value of all liquids produced was greater than the value of all gas produced, otherwise classifying them as gas wells.

Includes the cost of gas purchased for gas-lift and repressuring. See table 7A.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1963

Item	All types of operations	Producing operations					
		All producing operations			Oil well operations only		
		Total	With drilling	Without drilling	Total	With drilling	Without drilling
Establishments, total.....number..	14,378	13,082	5,810	7,272	8,715	3,388	5,327
With 0 to 19 employees.....do....	13,424	12,145	5,016	7,129	8,460	3,207	5,253
With 20 to 99 employees.....do....	774	757	622	135	241	171	70
With 100 employees and over.....do....	180	180	172	8	14	10	4
Wells producing during December 1963, total.....do....	573,456	571,898	436,761	135,137	211,198	118,070	93,128
Oil wells <sup>1</sup> .....do....	488,692	487,444	369,741	117,703	211,198	118,070	93,128
Gas wells <sup>1</sup> .....do....	84,764	84,454	67,020	17,434	-	-	-
Crude petroleum, field condensate, and drips shipped or used.....1,000 barrels..	2,688,873	2,688,873	2,422,301	266,572	569,488	388,836	180,652
Natural gas produced.....million cu. ft..	15,896,477	15,896,477	14,507,224	1,389,253	301,653	202,330	99,323
Natural gas shipped.....do....	13,780,498	13,780,498	12,495,673	1,284,825	259,152	167,510	91,642
Value of shipments and receipts, total.....\$1,000..	9,893,763	9,893,763	8,948,499	945,264	1,637,466	1,112,562	524,902
Crude petroleum, field condensate, and drips.....do....	7,671,681	7,671,681	6,912,439	759,242	1,576,269	1,064,494	511,775
Natural gas.....do....	2,160,235	2,160,235	1,979,234	181,001	39,912	28,490	11,422
Amount received or due for services.....do....	46,695	46,695	43,316	3,379	-	18,010	-
Products purchased and resold without further processing.....do....	15,152	15,152	13,510	1,642	21,285	1,570	1,705
Value added in mining.....do....	9,016,372	9,049,771	8,214,735	835,036	1,393,083	942,499	450,584
Persons in industry, total.....number..	159,088	156,275	127,998	28,277	39,377	21,309	18,068
Production, development, and exploration workers, average for the year.....do....	83,444	82,423	66,305	16,118	24,102	13,795	10,307
March.....do....	84,387	82,493	66,124	16,369	24,418	13,880	10,538
May.....do....	83,259	82,248	66,166	16,082	24,034	13,726	10,308
August.....do....	84,250	83,183	66,941	16,242	24,167	13,752	10,415
November.....do....	81,641	80,603	64,709	15,894	23,410	13,334	10,076
All other employees.....do....	61,800	60,760	53,464	7,296	8,290	4,330	3,960
Proprietors and firm members.....do....	13,844	13,092	8,229	4,863	6,985	3,184	3,801
Performing manual labor.....do....	6,617	6,011	3,250	2,761	4,330	2,237	2,093
Man-hours worked by production, development, and exploration workers, total.....1,000..	166,305	164,332	134,536	29,796	45,757	27,477	18,280
Operating and maintaining wells.....do....	131,668	131,543	104,350	27,193	37,128	20,422	16,706
Drilling wells and rig building.....do....	14,881	14,303	14,303	-	4,843	4,843	-
Exploration work (except drilling).....do....	14,537	13,335	11,479	1,856	2,598	1,325	1,273
Other work.....do....	5,219	5,151	4,404	747	1,188	887	301
Principal expenses designated below, total.....\$1,000..	3,682,502	3,597,689	3,340,842	256,847	587,090	434,525	152,565
Wages of production, development, and exploration workers.....do....	494,910	488,633	420,789	67,844	109,914	70,018	39,896
Salaries of all other employees.....do....	521,521	515,423	470,273	45,150	55,449	32,486	22,963
Supplies <sup>2</sup> .....do....	1,036,315	1,022,943	960,782	62,161	156,612	117,238	39,374
Purchases for resale.....do....	8,562	8,562	8,539	23	387	367	20
Fuels purchased.....do....	56,833	54,963	47,871	7,092	18,545	13,068	5,477
Electric energy purchased.....do....	77,826	77,684	66,726	10,958	24,460	17,168	7,292
Contract work.....do....	1,486,535	1,429,481	1,365,862	63,619	221,723	184,180	37,543
Purchased machinery installed.....do....	421,250	417,470	396,558	20,912	71,218	62,330	8,888
Capital expenditures, total.....do....	2,209,930	2,167,111	2,112,574	54,537	248,562	224,286	24,276
Development and exploration of mineral properties.....do....	1,329,563	1,292,786	1,277,072	15,714	123,604	115,893	7,711
New structures and additions.....do....	235,420	233,526	224,038	9,488	31,629	27,955	3,674
New machinery and equipment.....do....	546,228	542,449	522,885	19,564	78,170	70,658	7,512
Used plant and equipment.....do....	98,719	98,350	88,579	9,771	15,159	9,780	5,379
Energy used.....million kwh. equivalent..	146,168	145,694	133,022	12,672	17,687	12,282	5,405
Fuels produced and used for fuel at same establishment:							
Crude petroleum.....1,000 barrels..	558	558	393	165	316	155	161
Natural gas.....million cu. ft..	350,417	350,408	323,038	27,370	25,996	18,471	7,525
Fuels purchased:							
Distillate fuel oil.....1,000 barrels..	1,272	1,219	1,191	28	306	287	19
Residual fuel oil.....do....	678	677	655	22	226	211	15
Gas.....million cu. ft..	72,724	72,698	65,732	6,966	12,768	8,348	4,420
Gasoline.....1,000 gallons..	60,494	60,128	55,452	4,676	16,217	13,503	2,714
Other fuels.....\$1,000..	8,030	7,832	6,857	975	3,491	2,643	848
Undistributed.....do....	7,472	6,237	3,234	3,003	4,848	2,193	2,655
Electric energy purchased.....million kwh..	5,631	5,621	5,021	600	1,666	1,220	446
Electric energy generated and used.....do....	376	374	363	11	71	65	6
Wells drilled and completed except those drilled on contract for others:							
Drilled, total.....number..	39,886	37,978	37,978	-	14,858	14,858	-
Oil wells.....do....	19,016	18,668	18,668	-	7,956	7,956	-
Gas wells.....do....	4,388	4,147	4,147	-	-	-	-
Dry holes.....do....	13,902	12,605	12,605	-	5,781	5,781	-
Service wells.....do....	2,580	2,558	2,558	-	1,121	1,121	-
Footage of wells drilled.....1,000 ft..	171,943	164,292	164,292	-	45,280	45,280	-
Cost of drilling and equipping wells.....\$1,000..	2,050,762	1,989,091	1,989,091	-	319,503	319,503	-
Wells drilled and completed on contract for others:							
Drilled.....number..	2,121	2,119	2,119	-	1,194	1,194	-
Footage of wells drilled on contract.....1,000 ft..	6,730	6,728	6,728	-	3,151	3,151	-
Costs borne by drilling contracts in drilling and equipping wells.....\$1,000..	23,595	23,590	23,590	-	9,092	9,092	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	14,235	14,019	11,532	2,487	3,698	2,176	1,522
Per production worker.....hp..	170	170	173	154	153	158	148
Prime movers.....1,000 hp..	11,385	11,199	9,106	2,093	2,932	1,701	1,231
Electric motors driven by purchased energy.....do....	2,850	2,820	2,426	394	766	475	291
Horsepower rating of electric motors driven by energy generated at same establishment.....do....	142	140	120	20	43	33	10

See footnotes at end of table.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1963—Continued

Item	Producing operations--Continued						Nonproducing operations
	Oil and gas well operations			Gas well operations only			
	Total	With drilling	Without drilling	Total	With drilling	Without drilling	
Establishments, total.....number..	3,150	1,937	1,213	1,217	485	732	1,296
With 0 to 19 employees.....do....	2,516	1,358	1,158	1,169	451	718	1,279
With 20 to 99 employees.....do....	474	422	52	42	29	13	17
With 100 employees and over.....do....	160	157	3	6	5	1	-
Wells producing during December 1963, total.....do....	329,724	297,656	32,068	30,976	21,035	9,941	1,558
Oil wells <sup>1</sup> .....do....	274,100	249,457	24,643	-	-	-	1,248
Gas wells <sup>2</sup> .....do....	55,624	48,199	7,425	30,976	21,035	9,941	310
Crude petroleum, field condensate, and drips shipped or used.....1,000 barrels..	2,114,126	2,030,399	83,727	5,259	3,066	2,193	-
Natural gas produced.....million cu. ft..	13,681,867	12,847,456	834,411	1,912,957	1,457,438	455,519	-
Natural gas shipped.....do....	11,736,928	10,923,525	813,403	1,784,418	1,404,638	379,780	-
Value of shipments and receipts, total.....\$1,000..	7,961,912	7,604,605	357,307	294,385	231,330	63,055	-
Crude petroleum, field condensate, and drips.....do....	6,080,155	5,838,855	241,300	15,257	9,090	6,167	-
Natural gas.....do....	1,844,666	1,730,983	113,683	275,657	219,761	55,896	-
Amount received or due for services.....do....	23,866	22,827	1,039	3,471	2,479	992	-
Products purchased and resold without further processing.....do....	13,225	11,940	1,285				-
Value added in mining.....do....	7,374,667	7,048,977	325,690	282,021	223,259	58,762	( <sup>3</sup> )
Persons in industry, total.....number..	110,683	103,244	7,439	6,215	3,445	2,770	2,813
Production, development, and exploration workers, average for the year.....do....	54,875	50,521	4,354	3,446	1,989	1,457	1,021
March.....do....	54,672	50,267	4,405	3,403	1,977	1,426	961
May.....do....	54,775	50,441	4,334	3,439	1,999	1,440	1,011
August.....do....	55,518	51,188	4,330	3,498	2,001	1,497	1,067
November.....do....	53,753	49,407	4,346	3,440	1,968	1,472	1,038
All other employees.....do....	50,534	48,143	2,391	1,936	991	945	1,040
Proprietors and firm members.....do....	5,274	4,580	694	833	465	368	752
Performing manual labor.....do....	1,147	704	443	534	309	225	606
Man-hours worked by production, development, and exploration workers, total.....1,000..	111,879	103,147	8,732	6,696	3,912	2,784	1,973
Operating and maintaining wells.....do....	89,464	81,458	8,006	4,951	2,470	2,481	125
Drilling wells and rig building.....do....	8,545	8,545	-	915	915	-	578
Exploration work (except drilling).....do....	10,402	9,949	453	335	205	130	1,202
Other work.....do....	3,468	3,195	273	495	322	173	68
Principal expenses designated below, total.....\$1,000..	2,909,600	2,827,039	82,561	100,999	79,278	21,721	84,813
Wages of production, development, and exploration workers.....do....	361,781	339,792	21,989	16,938	10,979	5,959	6,277
Salaries of all other employees.....do....	448,419	431,410	17,009	11,555	6,377	5,178	6,098
Supplies <sup>2</sup> .....do....	845,195	826,139	19,056	21,136	17,405	3,731	13,372
Purchases for resale.....do....	8,175	8,172	3	-	-	-	-
Fuels purchased.....do....	35,205	33,772	1,433	1,213	1,031	182	1,870
Electric energy purchased.....do....	52,502	48,901	3,601	722	657	65	142
Contract work.....do....	1,158,323	1,138,853	19,470	49,435	42,829	6,606	57,054
Purchased machinery installed.....do....	334,861	325,924	8,937	11,391	8,304	3,087	3,780
Capital expenditures, total.....do....	1,847,016	1,826,133	20,883	71,533	62,155	9,378	42,819
Development and exploration of mineral properties.....do....	1,125,071	1,119,550	5,521	44,111	41,629	2,482	36,777
New structures and additions.....do....	191,836	188,388	3,448	10,061	7,695	2,366	1,894
New machinery and equipment.....do....	448,542	440,210	8,332	15,737	12,017	3,720	3,779
Used plant and equipment.....do....	81,567	77,985	3,582	1,624	814	810	369
Energy used.....million kwh. equivalent..	126,033	119,560	6,473	1,974	1,180	794	474
Fuels produced and used for fuel at same establishment:							
Crude petroleum.....1,000 barrels..	242	238	4	-	-	-	-
Natural gas.....million cu. ft..	320,080	302,676	17,404	4,332	1,891	2,441	9
Fuels purchased:							
Distillate fuel oil.....1,000 barrels..	808	803	5	105	101	4	53
Residual fuel oil.....do....	451	444	7	-	-	-	1
Gas.....million cu. ft..	58,952	56,428	2,524	978	956	22	26
Gasoline.....1,000 gallons..	42,802	41,123	1,679	1,109	826	283	366
Other fuels.....\$1,000..	4,119	3,996	123	222	218	4	198
Undistributed.....do....	1,328	1,041	287	61	-	61	1,235
Electric energy purchased.....million kwh..	3,903	3,752	151	52	49	3	10
Electric energy generated and used.....do....	303	298	5	(2)	(2)	(2)	2
Wells drilled and completed except those drilled on contract for others:							
Drilled, total.....number..	21,569	21,569	-	1,551	1,551	-	1,908
Oil wells.....do....	10,712	10,712	-	-	-	-	348
Gas wells.....do....	3,087	3,087	-	1,060	1,060	-	241
Dry holes.....do....	6,382	6,382	-	442	442	-	1,297
Service wells.....do....	1,388	1,388	-	49	49	-	22
Footage of wells drilled.....1,000 ft..	112,670	112,670	-	6,342	6,342	-	7,651
Cost of drilling and equipping wells.....\$1,000..	1,603,426	1,603,426	-	66,162	66,162	-	61,671
Wells drilled and completed on contract for others:							
Drilled.....number..	904	904	-	21	21	-	2
Footage of wells drilled on contract.....1,000 ft..	3,501	3,501	-	76	76	-	2
Costs borne by drilling contracts in drilling and equipping wells.....\$1,000..	13,497	13,497	-	1,001	1,001	-	5
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	9,832	9,047	785	489	309	180	216
Per production worker.....hp..	179	179	180	142	155	124	212
Prime movers.....1,000 hp..	7,810	7,125	685	457	280	177	186
Electric motors driven by purchased energy.....do....	2,022	1,922	100	32	29	3	30
Horsepower rating of electric motors driven by energy generated at same establishment.....do....	89	86	3	8	1	7	2

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
 (Z) Less than one-half of the unit of measure specified.

<sup>1</sup>For wells that produced both oil and gas, respondents were requested to classify the wells according to the more valuable total product; classifying "distillate" wells as oil wells if the value of all liquids produced was greater than the value of all gas produced, otherwise classifying them as gas wells.

<sup>2</sup>Includes the cost of gas purchased for gas lift and repressuring. See table 7A.

<sup>3</sup>Not shown since the cost of supplies, purchased fuel and electric energy, contract work, and purchased machinery installed exceeded capital expenditures.

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963

Item	Estab- lishments, total	Establishments with an average of--									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1311.--CRUDE PETROLEUM AND NATURAL GAS											
Establishments.....number..	14,378	11,188	1,418	818	570	204	120	41	13	6	-
All employees:											
Total.....do....	145,244	12,419	9,255	10,912	17,450	14,053	18,167	14,663	9,367	9,985	-
Payroll.....\$1,000..	1,016,431	47,640	46,671	57,996	107,934	98,107	130,828	111,878	69,240	79,373	-
Production, development, and exploration workers:											
Total.....number..	83,444	9,874	6,752	8,105	13,178	9,985	12,513	10,409	5,805	6,823	-
Man-hours.....1,000..	166,305	18,006	13,135	16,045	27,091	20,312	25,316	20,991	11,925	13,484	-
Wages.....\$1,000..	494,910	37,644	31,566	39,844	75,071	64,542	81,691	73,979	39,399	51,174	-
Value added in mining.....do....	9,016,372	884,709	434,032	517,328	1,072,675	977,602	1,498,036	1,526,669	1,078,343	1,026,978	-
Value of shipments and receipts.....do....	9,893,763	1,111,624	489,234	584,146	1,144,314	1,061,504	1,635,350	1,646,213	1,151,911	1,069,467	-
Capital expenditures.....do....	2,209,930	316,087	92,764	113,860	251,870	237,699	315,276	308,491	273,305	300,578	-
Crude Petroleum Subindustry											
Establishments.....number..	12,326	9,573	1,258	706	468	171	96	39	9	6	-
All employees:											
Total.....do....	125,842	10,864	8,208	9,438	14,312	11,781	14,236	20,408	(D)	9,985	-
Payroll.....\$1,000..	1892,632	41,869	40,888	48,926	87,922	82,628	102,945	159,311	(D)	79,373	-
Production, development, and exploration workers:											
Total.....number..	71,707	8,607	6,025	7,160	10,940	8,400	9,790	13,962	(D)	6,823	-
Man-hours.....1,000..	142,847	15,582	11,698	14,137	22,602	16,999	19,986	28,359	(D)	13,484	-
Wages.....\$1,000..	426,811	33,023	27,911	34,472	61,458	54,599	64,292	99,882	(D)	51,174	-
Value added in mining.....do....	7,812,956	662,370	360,250	401,117	826,200	826,365	1,200,937	2,508,739	(D)	1,026,978	-
Value of shipments and receipts.....do....	8,600,086	861,251	412,276	456,457	889,399	898,128	1,323,293	2,689,815	(D)	1,069,467	-
Capital expenditures.....do....	1,906,498	255,549	74,634	81,587	193,459	195,739	242,797	562,155	(D)	300,578	-
Natural Gas Subindustry											
Establishments.....number..	2,052	1,615	160	112	102	33	24	2	4	-	-
All employees:											
Total.....do....	19,402	1,555	1,047	1,474	3,138	2,272	3,931	3,622	(D)	-	-
Payroll.....\$1,000..	123,799	5,771	5,783	9,070	20,012	15,479	27,883	21,807	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	11,737	1,267	727	945	2,238	1,585	2,723	2,252	(D)	-	-
Man-hours.....1,000..	23,458	2,424	1,437	1,908	4,489	3,313	5,330	7,557	(D)	-	-
Wages.....\$1,000..	68,099	4,621	3,655	5,372	13,613	9,943	17,399	13,496	(D)	-	-
Value added in mining.....do....	1,203,416	222,339	73,782	116,211	246,475	151,237	297,099	96,273	(D)	-	-
Value of shipments and receipts.....do....	1,293,677	250,373	76,958	127,689	254,915	163,376	312,057	108,309	(D)	-	-
Capital expenditures.....do....	303,432	60,538	18,130	32,273	58,411	41,960	72,479	19,641	(D)	-	-
Type of Operation											
Producing establishments, total.....number..	13,082	9,981	1,368	796	558	199	120	41	13	6	-
Crude petroleum subindustry.....do....	11,126	8,457	1,210	686	457	166	96	39	9	6	-
Natural gas subindustry.....do....	1,956	1,524	158	110	101	33	24	2	4	-	-
With drilling, total.....do....	5,810	3,825	673	518	441	181	113	41	12	6	-
Crude petroleum subindustry.....do....	4,942	3,243	591	445	369	150	90	39	9	6	-
Natural gas subindustry.....do....	868	582	82	73	72	31	23	2	3	-	-
Without drilling, total.....do....	7,272	6,156	695	278	117	18	7	-	1	-	-
Crude petroleum subindustry.....do....	6,184	5,214	619	241	88	16	6	-	-	-	-
Natural gas subindustry.....do....	1,088	942	76	37	29	2	1	-	1	-	-
Oil well operations only, total.....do....	8,715	7,199	843	418	205	36	9	4	1	-	-
With drilling.....do....	3,388	2,591	365	251	143	28	5	4	1	-	-
Without drilling.....do....	5,327	4,608	478	167	62	8	4	-	-	-	-
Oil and gas well operations, total.....do....	3,150	1,718	460	338	320	154	107	36	11	6	-
With drilling.....do....	1,937	834	278	246	278	144	104	36	11	6	-
Without drilling.....do....	1,213	884	182	92	42	10	3	-	-	-	-
Gas well operations only, total.....do....	1,217	1,064	65	40	33	9	4	1	1	-	-
With drilling.....do....	485	400	30	21	20	9	4	1	-	-	-
Without drilling.....do....	732	664	35	19	13	-	-	-	1	-	-

- Represents zero.

(D) Withheld to avoid disclosing figures for individual companies. Data for this item are included in the underscored figures at the left.

Includes figures for separately reported central offices and related facilities. These were not included in the figures distributed by size of establishment.

**TABLE 5A. Industry-Product Analysis—Summary of Industry Shipments and Receipts and Net Shipments of Primary Products: 1963 and 1958**

(In thousands of dollars)

Ind. code	Industry or subindustry and year	Value of shipments and receipts of establishments classified in the industry or subindustry					Value of shipments of primary products		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total (produced in all industries)	Produced in this industry or subindustry	Produced in other industries or subindustries
131	Crude petroleum and natural gas industry.....1963..	9,893,763	9,831,916	-	46,695	15,152	9,882,493	9,831,916	50,577
	.....1958..	8,385,906	8,329,029	121	59,436	1,320	8,376,465	8,325,029	51,436
	Crude petroleum subindustry.....1963..	8,600,086	7,377,201	1,170,112	42,406	10,367	7,713,747	7,377,201	336,546
	.....1958..	7,809,898	6,899,121	854,006	55,480	1,291	7,082,194	6,899,121	183,073
	Natural gas subindustry.....1963..	1,293,677	990,123	294,480	4,289	4,785	2,168,746	990,123	1,178,623
	.....1958..	576,008	432,565	139,458	3,956	29	1,294,271	432,565	861,706

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

**TABLE 5B. Classes of Primary Products, by Industry and Subindustry: 1963**

Ind. code	Industry group, industry, or subindustry	Crude petroleum, field condensate, and drips		Natural gas	
		Quantity shipped or used in lease operations (1,000 barrels)	Value of shipments (\$1,000)	Quantity produced (million cu. ft.)	Value of shipments (\$1,000)
13	Oil and gas extraction industries, total.....	2,703,520	7,713,747	15,956,981	2,168,746
1311	Crude petroleum and natural gas industry, total.....	2,688,873	7,671,681	15,896,927	2,160,235
	Crude petroleum subindustry.....	2,587,961	7,377,201	9,392,163	1,170,112
	Natural gas subindustry.....	100,912	294,480	6,504,764	990,123
138	Oil and gas field services industries, total.....	14,647	42,066	60,054	8,511
1381	Drilling oil and gas wells industry.....	13,167	37,826	56,063	7,941
1382	Oil and gas exploration services industry.....	20	62	86	11
1389	Oil and gas field services, n.e.c., industry.....	1,460	4,178	3,905	559

n.e.c. Not elsewhere classified.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958

Product and geographic area	Unit of measure	1963		1958	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
UNITED STATES					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	2,703,520	(X)	12,367,809	(X)
Shipped.....	..do.....	2,701,978	7,713,747	12,366,212	17,082,194
Used in lease operations.....	..do.....	1,542	(X)	1,597	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	15,956,981	(X)	112,152,585	(X)
Gas from oil wells.....	..do.....	4,492,703	(X)	13,749,110	(X)
Gas from gas wells.....	..do.....	11,464,278	(X)	8,403,475	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	..do.....	12,983,331	2,015,664	9,453,339	1,190,926
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	857,136	153,082	680,897	103,345
Used in lease operations.....	..do.....	551,102	(X)	562,731	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	1,316,505	(X)	1,184,524	(X)
Net change in underground storage.....	..do.....	5,201	(X)	12,368	(X)
Vented to air, burned in flares, and other losses.....	..do.....	243,706	(X)	1258,726	(X)
MIDDLE ATLANTIC					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	6,838	(X)	8,171	(X)
Shipped.....	..do.....	6,807	29,344	8,163	33,334
Used in lease operations.....	..do.....	31	(X)	8	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	96,560	(X)	92,858	(X)
Gas from oil wells.....	..do.....	5,687	(X)	2,483	(X)
Gas from gas wells.....	..do.....	90,873	(X)	90,375	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	..do.....	60,920	16,493	51,624	13,774
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	29,831	10,032	32,803	10,397
Used in lease operations.....	..do.....	3,509	(X)	2,224	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	272	(X)		
Net change in underground storage and vented air, burned in flares, and other losses.....	..do.....	2,028	(X)	6,207	(X)
New York					
Crude petroleum, including field condensate and drips, shipped.....	1,000 barrels...	1,977	7,911	1,652	6,692
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	3,578	(X)	2,959	(X)
Gas from oil wells.....	..do.....	219	(X)	124	(X)
Gas from gas wells.....	..do.....	3,359	(X)	2,835	(X)
Disposition:					
Delivered to distributors, transmission companies, and consumers, and net deliveries to natural gas liquids plants <sup>3</sup> .....	..do.....	3,437	1,075	2,710	991
Used in lease operations; returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage; and vented to air, burned in flares, and other losses.....	..do.....	141	(X)	249	(X)
Pennsylvania					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	4,861	(X)	6,519	(X)
Shipped.....	..do.....	4,830	21,433	6,511	26,642
Used in lease operations.....	..do.....	31	(X)	8	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	92,982	(X)	89,899	(X)
Gas from oil wells.....	..do.....	5,468	(X)	2,359	(X)
Gas from gas wells.....	..do.....	87,514	(X)	87,540	(X)
Disposition:					
Delivered to distributors, transmission companies, and consumers, and net deliveries to natural gas liquids plants <sup>3</sup> .....	..do.....	87,314	25,450	81,717	23,180
Used in lease operations; returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage; and vented to air, burned in flares, and other losses.....	..do.....	5,668	(X)	8,182	(X)
EAST NORTH CENTRAL					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	106,792	(X)	99,957	(X)
Shipped.....	..do.....	106,760	311,874	99,865	297,424
Used in lease operations.....	..do.....	32	(X)	92	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	76,454	(X)	56,792	(X)
Gas from oil wells.....	..do.....	27,978	(X)	26,023	(X)
Gas from gas wells.....	..do.....	48,476	(X)	30,769	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	..do.....	52,411	11,895	29,883	5,774
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	18,145	4,790	15,382	4,442

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	Unit of measure	1963		1958	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
EAST NORTH CENTRAL—Continued					
Natural gas gross production—Continued					
Disposition—Continued					
Used in lease operations.....	Million cu. ft. <sup>2</sup>	4,456	(X)	8,604	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	563	(X)	1,433	(X)
Net change in underground storage and vented to air, burned in flares, and other losses.....	...do.....	879	(X)	1,490	(X)
Ohio					
Crude petroleum, including field condensate and drips, shipped or used in lease operations.....	1,000 barrels...	5,958	<sup>4</sup> 17,909	5,328	<sup>4</sup> 15,709
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	34,737	(X)	29,846	(X)
Gas from oil wells.....	...do.....	8,209	(X)	8,285	(X)
Gas from gas wells.....	...do.....	26,528	(X)	21,561	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	28,832	6,594	17,721	3,846
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	4,944	1,212	11,649	3,631
Used in lease operations; returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage; and vented to air, burned in flares, and other losses.....	...do.....	961	(X)	476	(X)
Indiana					
Crude petroleum, including field condensate and drips, shipped or used in lease operations.....	1,000 barrels...	11,912	<sup>4</sup> 31,984	10,402	<sup>4</sup> 30,980
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	521	(X)	1,156	(X)
Gas from oil wells.....	...do.....	449	(X)	957	(X)
Gas from gas wells.....	...do.....	72	(X)	199	(X)
Disposition:					
Delivered to distributors, transmission companies, and consumers, and net deliveries to natural gas liquids plants <sup>3</sup> .....					
Used in lease operations and vented to air, burned in flares, and other losses.....	...do.....	141	33	467	62
Losses.....	...do.....	380	(X)	689	(X)
Illinois					
Crude petroleum, including field condensate and drips, shipped or used in lease operations.....	1,000 barrels...	72,278	<sup>4</sup> 214,523	76,558	<sup>5</sup> 228,464
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	8,552	(X)	11,981	(X)
Gas from oil wells.....	...do.....	6,365	(X)	9,964	(X)
Gas from gas wells.....	...do.....	2,187	(X)	2,017	(X)
Disposition:					
Delivered to distributors, transmission companies, and consumers, and net deliveries to natural gas liquids plants <sup>3</sup> .....					
Used in lease operations.....	...do.....	6,193	868	4,618	613
Returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage; and vented to air, burned in flares, and other losses.....	...do.....	1,964	(X)	6,642	(X)
Used in lease operations.....	...do.....	395	(X)	721	(X)
Michigan					
Crude petroleum, including field condensate and drips, shipped or used in lease operations.....	1,000 barrels...	16,644	<sup>4</sup> 47,458	7,669	22,271
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	32,644	(X)	13,809	(X)
Gas from oil wells.....	...do.....	12,955	(X)	6,817	(X)
Gas from gas wells.....	...do.....	19,689	(X)	6,992	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	18,033	4,425	7,515	1,301
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	12,413	3,553	3,295	763
Used in lease operations.....	...do.....	1,506	(X)	1,141	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling; and vented to air, burned in flares, and other losses.....	...do.....	692	(X)	1,858	(X)
WEST NORTH CENTRAL					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	151,576	(X)	141,912	(X)
Shipped.....	...do.....	151,475	425,230	141,762	<sup>4</sup> 15,794
Used in lease operations.....	...do.....	101	(X)	150	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	777,587	(X)	573,744	(X)
Gas from oil wells.....	...do.....	67,900	(X)	49,891	(X)
Gas from gas wells.....	...do.....	709,687	(X)	523,853	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	711,393	92,197	528,306	59,981
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	53,791	8,021	31,175	6,241

See footnotes at end of table.



TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	Unit of measure	1963		1958	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
WEST NORTH CENTRAL—Continued					
Natural gas gross production—Continued					
Disposition—Continued					
Used in lease operations and returned to underground formations for repressuring, pressure maintenance, and cycling.....	Million cu. ft. <sup>2</sup>	6,142	(X)	9,311	(X)
Net change in underground storage; and vented to air, burned in flares, and other losses.....	...do.....	6,261	(X)	4,952	(X)
North Dakota					
Crude petroleum, including field condensate and drips, shipped or used in lease operations <sup>6</sup> .....	1,000 barrels...	22,665	<sup>4</sup> 62,116	13,932	<sup>5</sup> 40,405
Natural gas gross production <sup>7</sup> .....	Million cu. ft. <sup>2</sup>	32,909	(X)	15,705	(X)
Disposition:					
Delivered to distributors and transmission companies, and consumers, and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	31,216	2,653	14,156	1,052
Used in lease operations <sup>7</sup> .....	...do.....	1,184	(X)	520	(X)
Vented to air, burned in flares, and other losses.....	...do.....	509	(X)	1,029	(X)
Nebraska					
Crude petroleum, including field condensate and drips, shipped or used in lease operations <sup>6</sup> .....	1,000 barrels...	20,347	57,228	17,980	<sup>5</sup> 52,255
Natural gas gross production.....	Million cu. ft. <sup>2</sup>	8,920	(X)	20,484	(X)
Disposition:					
Delivered to distributors and transmission companies, and consumers, and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	7,582	1,299	16,629	4,955
Used in lease operations.....	...do.....	1,245	(X)	1,894	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage; and vented to air, burned in flares, and other losses.....	...do.....	93	(X)	1,961	(X)
Kansas					
Crude petroleum, including field condensate and drips, shipped or used in lease operations.....	1,000 barrels...	108,277	305,226	109,853	<sup>4</sup> 322,737
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	735,742	(X)	537,555	(X)
Gas from oil wells.....	...do.....	32,643	(X)	27,805	(X)
Gas from gas wells.....	...do.....	703,099	(X)	509,750	(X)
Disposition:					
Delivered:					
To distributors and transmission companies, and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	673,076	88,303	497,857	54,068
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	53,283	7,962	30,839	6,153
Used in lease operations and returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	3,879	(X)	6,841	(X)
Net change in underground storage and vented to air, burned in flares, and other losses.....	...do.....	5,504	(X)	2,018	(X)
Missouri and South Dakota					
Crude petroleum, including field condensate and drips, shipped <sup>6</sup> .....	1,000 barrels...	287	660	121	332
SOUTH ATLANTIC					
Crude petroleum, including field condensate and drips.....	...do.....	3,714	(X)	2,520	(X)
Shipped.....	...do.....	3,714	12,679	2,519	8,094
Used in lease operations.....	...do.....	-	(X)	1	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	192,602	(X)	184,412	(X)
Gas from oil wells.....	...do.....	9,504	(X)	6,967	(X)
Gas from gas wells.....	...do.....	183,098	(X)	177,445	(X)
Disposition:					
Delivered:					
To distributors and transmission companies, and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	156,088	39,127	141,539	31,767
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	30,489	9,075	34,910	8,849
Used in lease operations and returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	3,479	(X)	7,963	(X)
Net change in underground storage and vented to air, burned in flares, and other losses.....	...do.....	2,546	(X)		
West Virginia					
Natural gas gross production.....	...do.....	188,831	(X)	177,400	(X)
Delivered to distributors, transmission companies, and consumers, and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	182,979	47,211	169,481	38,792
Maryland, Virginia, and Florida					
Natural gas gross production.....	...do.....	3,771	(X)	7,012	(X)
Delivered to distributors, transmission companies, and consumers, and net deliveries to natural gas liquid plants <sup>3</sup> .....	...do.....	3,598	991	6,968	1,824
EAST SOUTH CENTRAL					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	87,320	(X)	59,550	(X)
Shipped.....	...do.....	87,314	240,036	59,538	169,659
Used in lease operations.....	...do.....	6	(X)	12	(X)

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	Unit of measure	1963		1958	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
EAST SOUTH CENTRAL—Continued					
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	289,969	(X)	293,325	(X)
Gas from oil wells.....	...do.....	93,134	(X)	68,208	(X)
Gas from gas wells.....	...do.....	196,835	(X)	225,117	(X)
Disposition:					
Delivered:					
To distributors and transmission companies, and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	226,826	43,417	209,385	37,156
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	10,463	1,977	6,912	1,369
Used in lease operations and returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	44,817	(X)	77,028	(X)
Net change in underground storage and vented to air, burned in flares, and other losses.....	...do.....	7,863	(X)		
Kentucky					
Crude petroleum, including field condensate and drips, shipped or used in lease operations <sup>6</sup> .....	1,000 barrels...	18,887	454,493	15,195	45,150
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	871,061	(X)	70,134	(X)
Gas from oil wells.....	...do.....	8681	(X)	661	(X)
Gas from gas wells.....	...do.....	70,380	(X)	69,473	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	62,990	13,473	64,028	15,409
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	5,516	1,007	3,410	668
Used in lease operations and returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	81,478	(X)	2,696	(X)
Net change in underground storage and vented to air, burned in flares, and other losses.....	...do.....	1,077	(X)		
Tennessee					
Crude petroleum, including field condensate and drips, shipped <sup>6</sup> .....	1,000 barrels...	34	99	6	18
Alabama					
Crude petroleum, including field condensate and drips, shipped <sup>6</sup> .....	...do.....	8,651	22,666	5,373	15,612
Mississippi					
Crude petroleum, including field condensate and drips, shipped or used in lease operations.....	...do.....	59,748	4162,778	38,968	4108,854
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	218,893	(X)	222,695	(X)
Gas from oil wells.....	...do.....	92,384	(X)	67,224	(X)
Gas from gas wells.....	...do.....	126,509	(X)	155,471	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	163,836	29,944	145,319	21,744
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	4,947	970	3,351	596
Used in lease operations and returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	43,339	(X)	74,025	(X)
Vented to air, burned in flares, and other losses.....	...do.....	6,771	(X)		
WEST SOUTH CENTRAL					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	1,682,866	(X)	1,440,112	(X)
Shipped.....	...do.....	1,682,114	4,979,847	1,439,391	4,406,661
Used in lease operations.....	...do.....	752	(X)	721	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	12,375,587	(X)	9,116,454	(X)
Gas from oil wells.....	...do.....	3,224,456	(X)	2,594,222	(X)
Gas from gas wells.....	...do.....	9,151,131	(X)	6,522,232	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	10,159,244	1,509,365	7,203,588	843,378
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	612,411	92,598	473,370	55,331
Used in lease operations.....	...do.....	404,078	(X)	385,296	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	1,009,604	(X)	855,223	(X)
Net change in underground storage.....	...do.....	1,506	(X)	3,675	(X)
Vented to air, burned in flares, and other losses.....	...do.....	189,034	(X)	195,302	(X)
Arkansas					
Crude petroleum, including field condensate and drips, shipped or used in lease operations.....	1,000 barrels...	20,650	53,946	27,162	477,382
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	89,180	(X)	47,001	(X)
Gas from oil wells.....	...do.....	47,043	(X)	21,920	(X)
Gas from gas wells.....	...do.....	42,137	(X)	25,081	(X)

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	Unit of measure	1963		1958	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
WEST SOUTH CENTRAL—Continued					
Arkansas—Continued					
Natural gas gross production—Continued					
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	Million cu. ft. <sup>2</sup>	55,606	8,704	33,131	4,347
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	9,790	4,929		
Used in lease operations and returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	21,160	(X)	12,657	(X)
Net change in underground storage and vented to air, burned in flares, and other losses.....	...do.....	2,624	(X)	1,213	(X)
Louisiana					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	503,500	(X)	312,747	(X)
Shipped.....	...do.....	503,490	1,546,720	312,733	1,008,107
Used in lease operations.....	...do.....	10	(X)	14	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	4,119,750	(X)	2,626,586	(X)
Gas from oil wells.....	...do.....	924,144	(X)	466,525	(X)
Gas from gas wells.....	...do.....	3,195,606	(X)	2,160,061	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	3,561,593	668,386	2,117,749	303,304
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	133,844	23,745	111,882	13,881
Used in lease operations.....	...do.....	131,126	(X)	100,559	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	215,810	(X)	228,798	(X)
Net change in underground storage and vented to air, burned in flares, and other losses.....	...do.....	77,377	(X)	67,598	(X)
North Louisiana					
Crude petroleum, including field condensate and drips shipped or used in lease operations.....	1,000 barrels...	53,641	4157,180	(NA)	(NA)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	580,586	(X)	(NA)	(X)
Gas from oil wells.....	...do.....	102,973	(X)	(NA)	(X)
Gas from gas wells.....	...do.....	477,613	(X)	(NA)	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	435,304	64,971	(NA)	(NA)
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	47,198	7,331	(NA)	(NA)
Used in lease operations.....	...do.....	21,890	(X)	(NA)	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	69,915	(X)	(NA)	(X)
Net change in underground storage and vented to air, burned in flares, and other losses.....	...do.....	6,279	(X)	(NA)	(X)
South Louisiana					
Crude petroleum, including field condensate and drips shipped or used in lease operations.....	1,000 barrels...	449,859	41,389,540	(NA)	(NA)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	3,539,164	(X)	(NA)	(X)
Gas from oil wells.....	...do.....	821,171	(X)	(NA)	(X)
Gas from gas wells.....	...do.....	2,717,993	(X)	(NA)	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	3,126,289	603,415	(NA)	(NA)
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	86,646	16,414	(NA)	(NA)
Used in lease operations.....	...do.....	109,236	(X)	(NA)	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	145,895	(X)	(NA)	(X)
Net change in underground storage and vented to air, burned in flares, and other losses.....	...do.....	71,098	(X)	(NA)	(X)
Oklahoma					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	199,801	(X)	187,835	(X)
Shipped.....	...do.....	199,585	559,918	187,611	552,533
Used in lease operations.....	...do.....	216	(X)	224	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	1,212,790	(X)	800,728	(X)
Gas from oil wells.....	...do.....	436,042	(X)	443,297	(X)
Gas from gas wells.....	...do.....	776,748	(X)	357,431	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	1,083,203	142,129	644,946	58,961
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	34,987	5,119		
See footnotes at end of table.					

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	Unit of measure	1963		1958	
		Quantity	Value	Quantity	Value
			(\$1,000)		(\$1,000)
WEST SOUTH CENTRAL—Continued					
Oklahoma—Continued					
Natural gas gross production—Continued					
Disposition—Continued					
Used in lease operations and returned to underground formations for repressuring, pressure maintenance, and cycling.....	Million cu. ft. <sup>2</sup>	85,995	(X)	131,050	(X)
Net change in underground storage and vented to air, burned in flares, and other losses.....	...do.....	8,605	(X)	24,732	(X)
Texas					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	958,915	(X)	912,368	(X)
Shipped.....	...do.....	958,389	2,907,263	911,894	2,768,639
Used in lease operations.....	...do.....	526	(X)	474	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	6,953,867	(X)	5,642,139	(X)
Gas from oil wells.....	...do.....	1,817,227	(X)	1,662,480	(X)
Gas from gas wells.....	...do.....	5,136,640	(X)	3,979,659	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	5,458,842	690,146	4,446,621	481,105
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	434,090	58,805	322,629	37,111
Used in lease operations.....	...do.....	237,030	(X)	251,596	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	721,971	(X)	515,859	(X)
Net change in underground storage.....	...do.....	851	(X)	3,675	(X)
Vented to air, burned in flares, and other losses.....	...do.....	101,083	(X)	101,759	(X)
Texas Gulf Coast A					
Crude petroleum, including field condensate and drips shipped or used in lease operations.....	1,000 barrels...	143,002	442,098	(NA)	(NA)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	1,415,416	(X)	(NA)	(X)
Gas from oil wells.....	...do.....	330,498	(X)	(NA)	(X)
Gas from gas wells.....	...do.....	1,084,648	(X)	(NA)	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	929,985	150,520	(NA)	(NA)
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	107,350	14,321	(NA)	(NA)
Used in lease operations.....	...do.....	74,146	(X)	(NA)	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	279,229	(X)	(NA)	(X)
Net change in underground storage.....	...do.....	127	(X)	(NA)	(X)
Vented to air, burned in flares, and other losses.....	...do.....	24,309	(X)	(NA)	(X)
Texas Gulf Coast B					
Crude petroleum, including field condensate and drips shipped or used in lease operations.....	1,000 barrels...	48,324	147,203	(NA)	(NA)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	842,544	(X)	(NA)	(X)
Gas from oil wells.....	...do.....	149,630	(X)	(NA)	(X)
Gas from gas wells.....	...do.....	692,914	(X)	(NA)	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	722,277	95,801	(NA)	(NA)
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	37,515	5,867	(NA)	(NA)
Used in lease operations.....	...do.....	31,519	(X)	(NA)	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	37,294	(X)	(NA)	(X)
Net change in underground storage.....	...do.....	615	(X)	(NA)	(X)
Vented to air, burned in flares, and other losses.....	...do.....	13,324	(X)	(NA)	(X)
South Texas					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	74,323	(X)	(NA)	(X)
Shipped.....	...do.....	74,180	226,158	(NA)	(NA)
Used in lease operations.....	...do.....	143	(X)	(NA)	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	1,393,471	(X)	(NA)	(X)
Gas from oil wells.....	...do.....	249,263	(X)	(NA)	(X)
Gas from gas wells.....	...do.....	1,144,208	(X)	(NA)	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	978,208	123,393	(NA)	(NA)
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	71,130	10,954	(NA)	(NA)
Used in lease operations.....	...do.....	39,675	(X)	(NA)	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	279,770	(X)	(NA)	(X)
Net change in underground storage.....	...do.....	13	(X)	(NA)	(X)
Vented to air, burned in flares, and other losses.....	...do.....	24,675	(X)	(NA)	(X)

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	Unit of measure	1963		1958	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
WEST SOUTH CENTRAL—Continued					
Southwest Texas					
Crude petroleum, including field condensate and drips shipped or used in lease operations.....	1,000 barrels...	19,404	55,604	(NA)	(NA)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	125,575	(X)	(NA)	(X)
Gas from oil wells.....	..do.....	18,798	(X)	(NA)	(X)
Gas from gas wells.....	..do.....	106,777	(X)	(NA)	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	..do.....	121,137	16,332	(NA)	(NA)
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	822	115	(NA)	(NA)
Used in lease operations.....	..do.....	2,158	(X)	(NA)	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	220	(X)	(NA)	(X)
Vented to air, burned in flares, and other losses.....	..do.....	1,238	(X)	(NA)	(X)
North Central Texas A					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	62,936	(X)	(NA)	(X)
Shipped.....	..do.....	62,908	185,012	(NA)	(NA)
Used in lease operations.....	..do.....	28	(X)	(NA)	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	125,824	(X)	(NA)	(X)
Gas from oil wells.....	..do.....	48,060	(X)	(NA)	(X)
Gas from gas wells.....	..do.....	77,764	(X)	(NA)	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	..do.....	118,624	15,280	(NA)	(NA)
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	1,129	109	(NA)	(NA)
Used in lease operations.....	..do.....	4,427	(X)	(NA)	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	320	(X)	(NA)	(X)
Vented to air, burned in flares, and other losses.....	..do.....	1,324	(X)	(NA)	(X)
North Central Texas B					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	40,937	(X)	(NA)	(X)
Shipped.....	..do.....	40,903	119,212	(NA)	(NA)
Used in lease operations.....	..do.....	34	(X)	(NA)	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	92,444	(X)	(NA)	(X)
Gas from oil wells.....	..do.....	38,214	(X)	(NA)	(X)
Gas from gas wells.....	..do.....	54,230	(X)	(NA)	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	..do.....	84,803	9,323	(NA)	(NA)
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	997	101	(NA)	(NA)
Used in lease operations.....	..do.....	3,360	(X)	(NA)	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	1,143	(X)	(NA)	(X)
Net change in underground storage.....	..do.....	8	(X)	(NA)	(X)
Vented to air, burned in flares, and other losses.....	..do.....	2,133	(X)	(NA)	(X)
East Texas A					
Crude petroleum, including field condensate and drips shipped or used in lease operations.....	1,000 barrels...	28,809	83,110	(NA)	(NA)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	95,586	(X)	(NA)	(X)
Gas from oil wells.....	..do.....	55,223	(X)	(NA)	(X)
Gas from gas wells.....	..do.....	40,363	(X)	(NA)	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	..do.....	70,712	9,603	(NA)	(NA)
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	3,243	504	(NA)	(NA)
Used in lease operations.....	..do.....	3,837	(X)	(NA)	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	16,345	(X)	(NA)	(X)
Net change in underground storage.....	..do.....	-	(X)	(NA)	(X)
Vented to air, burned in flares, and other losses.....	..do.....	1,449	(X)	(NA)	(X)
East Texas B					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	83,549	(X)	(NA)	(X)
Shipped.....	..do.....	83,537	241,911	(NA)	(NA)
Used in lease operations.....	..do.....	12	(X)	(NA)	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	611,461	(X)	(NA)	(X)
Gas from oil wells.....	..do.....	61,788	(X)	(NA)	(X)
Gas from gas wells.....	..do.....	549,673	(X)	(NA)	(X)

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	Unit of measure	1963		1958	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
WEST SOUTH CENTRAL—Continued					
East Texas B—Continued					
Natural gas gross production—Continued					
Disposition:					
Delivered:					
To distributors and transmission companies and net delivered to natural gas liquids plants <sup>3</sup> .....	Million cu. ft. <sup>2</sup>	538,211	72,307	(NA)	(NA)
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	43,162	6,231	(NA)	(NA)
Used in lease operations.....	..do.....	10,752	(X)	(NA)	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	11,204	(X)	(NA)	(X)
Net change in underground storage.....	..do.....	46	(X)	(NA)	(X)
Vented to air, burned in flares, and other losses.....	..do.....	8,086	(X)	(NA)	(X)
West Texas A					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	384,107	(X)	(NA)	(X)
Shipped.....	..do.....	383,960	1,108,944	(NA)	(NA)
Used in lease operations.....	..do.....	147	(X)	(NA)	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	1,171,646	(X)	(NA)	(X)
Gas from oil wells.....	..do.....	627,170	(X)	(NA)	(X)
Gas from gas wells.....	..do.....	544,476	(X)	(NA)	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	..do.....	1,000,346	91,241	(NA)	(NA)
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	19,010	2,097	(NA)	(NA)
Used in lease operations.....	..do.....	56,577	(X)	(NA)	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	77,339	(X)	(NA)	(X)
Net change in underground storage.....	..do.....	42	(X)	(NA)	(X)
Vented to air, burned in flares, and other losses.....	..do.....	18,332	(X)	(NA)	(X)
West Texas B					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	36,618	(X)	(NA)	(X)
Shipped.....	..do.....	36,478	103,560	(NA)	(NA)
Used in lease operations.....	..do.....	140	(X)	(NA)	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	163,880	(X)	(NA)	(X)
Gas from oil wells.....	..do.....	97,387	(X)	(NA)	(X)
Gas from gas wells.....	..do.....	66,493	(X)	(NA)	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	..do.....	141,724	14,053	(NA)	(NA)
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	10,335	836	(NA)	(NA)
Used in lease operations.....	..do.....	4,494	(X)	(NA)	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	5,143	(X)	(NA)	(X)
Vented to air, burned in flares, and other losses.....	..do.....	2,184	(X)	(NA)	(X)
Texas Panhandle					
Crude petroleum, including field condensate and drips shipped or used in lease operations.....	1,000 barrels...	36,906	4106,391	(NA)	(NA)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	916,290	(X)	(NA)	(X)
Gas from oil wells.....	..do.....	116,922	(X)	(NA)	(X)
Gas from gas wells.....	..do.....	799,368	(X)	(NA)	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	..do.....	752,815	92,293	(NA)	(NA)
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	139,397	17,670	(NA)	(NA)
Used in lease operations.....	..do.....	6,085	(X)	(NA)	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	..do.....	13,964	(X)	(NA)	(X)
Vented to air, burned in flares, and other losses.....	..do.....	4,029	(X)	(NA)	(X)
MOUNTAIN					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	344,400	(X)	304,820	(X)
Shipped.....	..do.....	344,166	918,863	304,544	854,458
Used in lease operations.....	..do.....	234	(X)	276	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	1,268,018	(X)	1,073,167	(X)
Gas from oil wells.....	..do.....	509,731	(X)	391,261	(X)
Gas from gas wells.....	..do.....	758,287	(X)	681,906	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	..do.....	1,108,619	137,513	905,749	91,790
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	..do.....	30,068	2,908	44,021	5,076

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	Unit of measure	1963		1958	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
MOUNTAIN—Continued					
Natural gas gross production—Continued					
Disposition—Continued					
Used in lease operations.....	Million cu. ft. <sup>2</sup>	44,279	(X)	73,384	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	69,641	(X)	56,240	(X)
Net change in underground storage.....	...do.....	363	(X)	569	(X)
Vented to air, burned in flares, and other losses.....	...do.....	15,048	(X)	33,204	(X)
Montana					
Crude petroleum, including field condensate and drips <sup>6</sup> .....	1,000 barrels...	29,470	(X)	28,439	(X)
Shipped.....	...do.....	29,405	72,218	28,374	75,523
Used in lease operations.....	...do.....	65	(X)	65	(X)
Natural gas gross production.....	Million cu. ft. <sup>2</sup>	25,519	(X)	32,922	(X)
Disposition:					
Delivered to distributors, transmission companies, and consumers, and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	21,653	1,773	30,168	2,098
Used in lease operations.....	...do.....	2,919	(X)	1,669	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage; and vented to air, burned in flares, and other losses.....	...do.....	947	(X)	1,085	(X)
Wyoming					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	133,114	(X)	108,362	(X)
Shipped.....	...do.....	133,478	734,920	108,281	281,969
Used in lease operations.....	...do.....	36	(X)	81	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	230,711	(X)	160,092	(X)
Gas from oil wells.....	...do.....	72,298	(X)	62,194	(X)
Gas from gas wells.....	...do.....	158,413	(X)	97,898	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	193,256	28,235	122,080	13,907
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	8,479	860	5,280	493
Used in lease operations.....	...do.....	12,219	(X)	10,831	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	13,259	(X)	13,121	(X)
Net change in underground storage and vented to air, burned in flares, and other losses.....	...do.....	3,498	(X)	8,780	(X)
Colorado					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	38,276	(X)	48,194	(X)
Shipped.....	...do.....	38,235	109,327	48,185	143,270
Used in lease operations.....	...do.....	41	(X)	9	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	135,374	(X)	132,552	(X)
Gas from oil wells.....	...do.....	72,790	(X)	77,560	(X)
Gas from gas wells.....	...do.....	62,584	(X)	54,992	(X)
Disposition:					
Delivered to distributors, transmission companies, and consumers, and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	84,938	10,337	78,503	11,816
Used in lease operations.....	...do.....	9,158	(X)	7,978	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage; and vented to air, burned in flares, and other losses.....	...do.....	41,278	(X)	46,071	(X)
New Mexico					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	109,839	(X)	95,379	(X)
Shipped.....	...do.....	109,754	313,507	95,297	281,748
Used in lease operations.....	...do.....	85	(X)	82	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	782,821	(X)	718,785	(X)
Gas from oil wells.....	...do.....	283,334	(X)	233,878	(X)
Gas from gas wells.....	...do.....	499,487	(X)	484,907	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	750,984	87,159	674,254	63,273
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	7,714	963	21,565	2,681
Used in lease operations.....	...do.....	16,337	(X)	11,715	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage; and vented to air, burned in flares, and other losses.....	...do.....	7,786	(X)	11,251	(X)
East New Mexico					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	98,417	(X)	(NA)	(X)
Shipped.....	...do.....	98,343	283,436	(NA)	(NA)
Used in lease operations.....	...do.....	74	(X)	(NA)	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	411,300	(X)	(NA)	(X)
Gas from oil wells.....	...do.....	267,589	(X)	(NA)	(X)
Gas from gas wells.....	...do.....	143,711	(X)	(NA)	(X)

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	Unit of measure	1963		1958	
		Quantity	Value	Quantity	Value
			(\$1,000)		(\$1,000)
MOUNTAIN—Continued					
East New Mexico—Continued					
Natural gas gross production—Continued					
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	Million cu. ft. <sup>2</sup>	383,996	41,068	(NA)	(NA)
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	6,925	855	(NA)	(NA)
Used in lease operations.....	...do.....	14,438	(X)	(NA)	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage; and vented to air, burned in flares, and other losses.....	...do.....	5,941	(X)	(NA)	(X)
West New Mexico					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	11,422	(X)	(NA)	(X)
Shipped.....	...do.....	11,411	30,071	(NA)	(NA)
Used in lease operations.....	...do.....	11	(X)	(NA)	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	371,521	(X)	(NA)	(X)
Gas from oil wells.....	...do.....	15,745	(X)	(NA)	(X)
Gas from gas wells.....	...do.....	355,776	(X)	(NA)	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	366,988	46,091	(NA)	(NA)
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	789	108	(NA)	(NA)
Used in lease operations.....	...do.....	1,899	(X)	(NA)	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage; and vented to air, burned in flares, and other losses.....	...do.....	1,845	(X)	(NA)	(X)
Utah					
Crude petroleum, including field condensate and drips <sup>6</sup> .....	1,000 barrels...	33,162	<sup>4</sup> 88,653	<sup>9</sup> 24,437	<sup>4</sup> <sup>9</sup> 71,915
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	92,519	(X)	<sup>9</sup> 28,816	(X)
Gas from oil wells.....	...do.....	75,250	(X)	<sup>9</sup> 11,306	(X)
Gas from gas wells.....	...do.....	17,269	(X)	<sup>9</sup> 17,510	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	69,525	10,650	} <sup>9</sup> 17,920	} <sup>9</sup> 2,598
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	1,073	161		
Used in lease operations.....	...do.....	3,639	(X)	<sup>9</sup> 1,191	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling; net change in underground storage; and vented to air, burned in flares, and other losses.....	...do.....	18,282	(X)	<sup>9</sup> 9,705	(X)
Arizona and Nevada					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	139	<sup>5</sup> 238	( <sup>9</sup> )	( <sup>9</sup> )
Natural gas gross production.....	Million cu. ft. <sup>2</sup>	1,074	(X)	( <sup>9</sup> )	(X)
Disposition:					
Delivered to distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....					
Used in lease operations.....	...do.....	1,065	283	( <sup>9</sup> )	( <sup>9</sup> )
Net change in underground storage and vented to air, burned in flares, and other losses.....	...do.....	7	(X)	( <sup>9</sup> )	(X)
	...do.....	2	(X)	( <sup>9</sup> )	(X)

See footnotes at end of table.



TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	Unit of measure	1963		1958	
		Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
PACIFIC					
Crude petroleum, including field condensate and drips.....	1,000 barrels...	320,014	(X)	<sup>1</sup> 310,767	(X)
Shipped.....	...do.....	<sup>1</sup> 19,628	795,874	<sup>1</sup> 310,430	<sup>1</sup> 896,770
Used in lease operations.....	...do.....	386	(X)	337	(X)
Natural gas gross production, total.....	Million cu. ft. <sup>2</sup>	880,204	(X)	<sup>1</sup> 761,833	(X)
Gas from oil wells.....	...do.....	554,313	(X)	<sup>1</sup> 610,055	(X)
Gas from gas wells.....	...do.....	<sup>2</sup> 25,891	(X)	151,778	(X)
Disposition:					
Delivered:					
To distributors and transmission companies and net deliveries to natural gas liquids plants <sup>3</sup> .....	...do.....	507,830	165,657	783,265	107,302
To consumers (domestic, commercial, and industrial, including deliveries to own refineries).....	...do.....	71,638	23,681	42,324	10,977
Used in lease operations.....	...do.....	75,003	(X)	109,078	(X)
Returned to underground formations for repressuring, pressure maintenance, and cycling.....	...do.....	202,199	(X)	208,710	(X)
Net change in underground storage and vented to air, burned in flares, and other losses.....	...do.....	23,534	(X)	<sup>1</sup> 18,456	(X)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Excludes data for Alaska.

<sup>2</sup>Represents volumes adjusted to a pressure base of 14.65 pounds absolute at 60°F for 1963, and to 14.73 pounds absolute at 60°F for 1958.

<sup>3</sup>Respondents were requested to include, besides the value of residue gas, the producers' realization from all products contained in the gas delivered to natural gas liquids plants.

<sup>4</sup>Excludes the value of the small quantity of crude petroleum produced and used in lease operations at the same establishment, amounting to less than 0.1 percent of the total quantity shown.

<sup>5</sup>Excludes the value of the small quantity of crude petroleum produced and used in lease operations at the same establishment, amounting to less than 0.6 percent of the total quantity shown.

<sup>6</sup>Excludes data for field condensate and drips shipped, amounting for Missouri, North Dakota, South Dakota, and Nebraska combined to 26 thousand barrels valued at \$65 thousand dollars; for Kentucky, Tennessee, and Alabama combined to 8 thousand barrels valued at \$25 thousand; and for Montana, Utah, Arizona, and Nevada combined to 9 thousand barrels valued at \$33 thousand.

<sup>7</sup>Includes data for South Dakota, amounting to less than 0.2 percent of the total shown.

<sup>8</sup>Includes data for Alabama, amounting to less than one-third of the total shown.

<sup>9</sup>Data for Arizona and Nevada are included with those for Utah.

TABLE 6B. Product Classes—Indexes of Production and Unit Value for Primary Products Shipped by All Producers: 1963 and 1958

Product code	Product and year	Indexes (1954 = 100)	
		Production	Unit value
	Crude petroleum and Natural Gas Industry Products.....	1963..	107
	.....	1958..	109
	Crude petroleum.....	1963..	103
	.....	1958..	108
	Natural gas.....	1963..	133
	.....	1958..	108
	Wells drilled.....	1963..	100
	.....	1958..	112
	Oil wells.....	1963..	100
	.....	1958..	113
	Gas wells.....	1963..	113
	.....	1958..	123
	Dry holes.....	1963..	92
	.....	1958..	103
	Service wells.....	1963..	108
	.....	1958..	102

TABLE 6C. Shipments of Primary Products Distributed by Unit Values,  
by Geographic Areas: 1963

Product, item, and division	Shipments by average value per barrel													
	Total	Less than \$1.80	\$1.80 to \$2.04	\$2.05 to \$2.29	\$2.30 to \$2.59	\$2.60 to \$2.94	\$2.95 to \$3.34	\$3.35 to \$3.79	\$3.80 and over					
CRUDE PETROLEUM, INCLUDING FIELD CONDENSATE AND DRIPS														
United States, total:														
Quantity shipped....million barrels..	2,702.0	3.9	20.0	45.6	440.1	1,049.2	1,099.5	33.7	10.0					
Percent of total.....	100.0	0.1	0.7	1.7	16.3	38.8	40.7	1.3	0.4					
Value of shipments.....million dollars..	7,713.7	6.6	39.6	99.4	1,078.1	2,961.3	3,370.5	114.8	43.4					
Percent of total.....	100.0	0.1	0.5	1.3	14.0	38.4	43.7	1.5	0.5					
Middle Atlantic:														
Quantity shipped.....million barrels..	6.8	0.0	0.0	0.0	0.2	0.1	0.5	0.1	5.9					
Percent of total.....	100.0	0.0	0.5	0.6	3.0	1.7	7.6	1.0	85.4					
Value of shipments.....million dollars..	29.3	0.0	0.1	0.1	0.5	0.3	1.6	0.3	26.4					
Percent of total.....	100.0	0.0	0.2	0.3	1.7	1.1	5.3	0.9	90.5					
East North Central:														
Quantity shipped.....million barrels..	106.8	0.0	0.2	0.3	1.9	21.8	81.9	0.3	0.4					
Percent of total.....	100.0	0.0	0.1	0.3	1.8	20.4	76.8	0.2	0.4					
Value of shipments.....million dollars..	311.9	0.0	0.4	0.7	4.6	61.8	241.8	0.9	1.7					
Percent of total.....	100.0	0.0	0.1	0.2	1.5	19.8	77.6	0.3	0.5					
West North Central:														
Quantity shipped.....million barrels..	151.5	0.4	1.4	1.2	21.2	102.8	22.2	0.9	1.4					
Percent of total.....	100.0	0.2	0.9	0.8	14.0	68.0	14.6	0.6	0.9					
Value of shipments.....million dollars..	425.2	0.7	2.6	2.7	52.6	291.2	66.5	3.4	5.5					
Percent of total.....	100.0	0.2	0.6	0.6	12.4	68.5	15.6	0.8	1.3					
South Atlantic:														
Quantity shipped.....million barrels..	3.7	0.0	0.5	0.0	0.0	0.4	0.6	0.5	1.7					
Percent of total.....	100.0	0.0	13.5	0.0	0.0	10.8	16.2	13.5	45.9					
Value of shipments.....million dollars..	12.7	0.0	1.0	0.0	0.0	1.1	1.7	2.0	6.9					
Percent of total.....	100.0	0.0	7.9	0.0	0.0	8.7	13.4	15.7	54.3					
East South Central:														
Quantity shipped.....million barrels..	87.3	0.0	0.6	2.0	17.5	39.2	28.0	0.0	0.0					
Percent of total.....	100.0	0.0	0.7	2.3	20.0	44.9	32.1	0.0	0.0					
Value of shipments.....million dollars..	240.0	0.0	1.2	4.5	41.9	108.0	84.4	0.0	0.0					
Percent of total.....	100.0	0.0	0.5	1.9	17.4	45.0	35.2	0.0	0.0					
West South Central:														
Quantity shipped.....million barrels..	1,682.1	0.1	2.5	7.0	77.6	642.1	920.6	31.9	0.3					
Percent of total.....	100.0	0.0	0.1	0.4	4.6	38.2	54.7	1.9	0.0					
Value of shipments.....million dollars..	4,979.8	0.1	4.8	15.2	192.3	1,822.5	2,835.1	108.1	1.7					
Percent of total.....	100.0	0.0	0.1	0.3	3.9	36.6	56.9	2.2	0.0					
Mountain:														
Quantity shipped.....million barrels..	344.2	0.3	3.7	13.3	133.0	170.1	23.8	0.0	0.0					
Percent of total.....	100.0	0.1	1.1	3.9	38.6	49.4	6.9	0.0	0.0					
Value of shipments.....million dollars..	918.9	0.6	7.5	28.6	330.1	480.0	72.1	0.0	0.0					
Percent of total.....	100.0	0.1	0.8	3.1	35.9	52.2	7.9	0.0	0.0					
Pacific:														
Quantity shipped.....million barrels..	319.6	3.1	11.1	21.8	188.7	72.7	21.9	0.0	0.3					
Percent of total.....	100.0	1.0	3.5	6.8	59.0	22.7	6.9	0.0	0.1					
Value of shipments.....million dollars..	795.9	5.2	22.0	47.6	456.1	196.5	67.3	0.1	1.1					
Percent of total.....	100.0	0.7	2.8	6.0	57.3	24.7	8.4	0.0	0.1					
Shipments by average value per thousand cu. ft.														
Product, item, and geographic area <sup>1</sup>	Total	Less than 4.9¢	4.9¢ to 7.9¢	8.0¢ to 11.1¢	11.2¢ to 12.5¢	12.6¢ to 14.1¢	14.2¢ to 15.9¢	16.0¢ to 17.9¢	18.0¢ to 20.4¢	20.5¢ to 22.9¢	23.0¢ to 25.9¢	26.0¢ to 33.4¢	33.5¢ to 42.9¢	43.0¢ and over
NATURAL GAS														
Delivered to Distributors and Transmission Companies and Net Deliveries to Natural Gas Liquids Plants <sup>2</sup>														
United States, total:														
Quantity shipped...billion cu. ft. <sup>3</sup> ..	12,983.3	47.0	513.0	2,030.6	1,234.4	2,053.6	1,932.9	1,232.1	2,222.4	921.3	246.2	383.8	61.1	104.9
Percent of total.....	100.0	0.4	4.0	15.6	9.5	15.8	14.9	9.5	17.1	7.1	1.9	2.9	0.5	0.8
Value of shipments.....million dollars..	2,015.7	2.1	32.6	197.9	147.0	270.0	289.6	210.3	425.6	197.2	61.2	111.6	21.0	49.6
Percent of total.....	100.0	0.1	1.6	9.8	7.3	13.4	14.4	10.4	21.1	9.8	3.0	5.5	1.1	2.5
Middle Atlantic:														
Quantity shipped.....billion cu. ft. <sup>3</sup> ..	60.9	0.0	0.0	0.0	1.1	0.5	2.2	0.3	0.8	1.4	8.0	43.8	2.8	0.0
Percent of total.....	100.0	0.0	0.0	0.0	1.8	0.8	3.6	0.5	1.3	2.3	13.2	71.9	4.6	0.0
Value of shipments.....million dollars..	16.5	0.0	0.0	0.0	0.1	0.1	0.3	0.1	0.2	0.3	2.0	12.3	1.1	0.0
Percent of total.....	100.0	0.0	0.0	0.0	0.6	0.6	1.8	0.6	1.2	1.8	12.1	74.6	6.7	0.0
East North Central:														
Quantity shipped.....billion cu. ft. <sup>3</sup> ..	52.4	0.0	0.1	0.6	0.2	0.3	8.1	0.9	6.2	7.2	21.8	7.0	0.0	0.0
Percent of total.....	100.0	0.0	0.2	1.1	0.4	0.6	15.5	1.7	11.8	13.7	41.6	13.4	0.0	0.0
Value of shipments.....million dollars..	11.9	0.0	0.0	0.1	0.0	0.0	1.2	0.2	1.2	1.6	5.5	2.1	0.0	0.0
Percent of total.....	100.0	0.0	0.0	0.8	0.0	0.0	10.1	1.7	10.1	13.4	46.2	17.7	0.0	0.0

See footnotes at end of table.

by Geographic Areas: 1963—Continued

Product, item, and geographic area <sup>1</sup>	Shipments by average value per thousand cu. ft.													
	Total	Less than 4.9¢	4.9¢ to 7.9¢	8.0¢ to 11.1¢	11.2¢ to 12.5¢	12.6¢ to 14.1¢	14.2¢ to 15.9¢	16.0¢ to 17.9¢	18.0¢ to 20.4¢	20.5¢ to 22.9¢	23.0¢ to 25.9¢	26.0¢ to 33.4¢	33.5¢ to 42.9¢	43.0¢ and over
NATURAL GAS—Con.														
Delivered to Distributors and Transmission Companies and Net Deliveries to Natural Gas Liquids Plants <sup>2</sup> —Con.														
West North Central:														
Quantity shipped.....billion cu. ft. <sup>3</sup> ..	711.4	1.2	6.5	169.3	89.0	151.3	279.4	9.0	5.4	0.2	0.0	0.1	0.0	0.0
Percent of total.....	100.0	0.2	0.9	23.8	12.5	21.3	39.3	1.3	0.7	0.0	0.0	0.0	0.0	0.0
Value of shipments.....million dollars..	92.2	0.0	0.4	17.8	10.7	19.4	41.4	1.4	1.0	0.1	0.0	0.0	0.0	0.0
Percent of total.....	100.0	0.0	0.4	19.3	11.6	21.1	44.9	1.5	1.1	0.1	0.0	0.0	0.0	0.0
South Atlantic:														
Quantity shipped.....billion cu. ft. <sup>3</sup> ..	156.1	0.0	0.0	0.4	0.3	0.9	4.8	2.6	6.8	11.1	58.0	71.2	(D)	0.0
Percent of total.....	100.0	0.0	0.0	0.3	0.2	0.6	3.1	1.7	4.3	7.1	37.1	45.6	(D)	0.0
Value of shipments.....million dollars..	39.1	0.0	0.0	0.0	0.0	0.1	0.7	0.4	1.3	2.4	14.3	19.9	(D)	0.0
Percent of total.....	100.0	0.0	0.0	0.0	0.0	0.3	1.8	1.0	3.3	6.1	36.6	50.9	(D)	0.0
East South Central:														
Quantity shipped.....billion cu. ft. <sup>3</sup> ..	226.8	1.6	0.0	2.9	12.7	7.3	30.9	28.3	70.3	38.3	34.5	(D)	0.0	(D)
Percent of total.....	100.0	0.7	0.0	1.3	5.6	3.2	13.6	12.5	31.0	16.9	15.2	(D)	0.0	(D)
Value of shipments.....million dollars..	43.4	0.1	0.0	0.3	1.5	1.0	4.7	5.0	13.1	8.4	9.3	0.0	0.0	0.0
Percent of total.....	100.0	0.2	0.0	0.7	3.5	2.3	10.8	11.5	30.2	19.4	21.4	0.0	0.0	(D)
West South Central:														
Quantity shipped.....billion cu. ft. <sup>3</sup> ..	10,159.2	42.0	455.8	1,585.0	813.1	1,639.0	1,489.7	1,154.2	2,071.9	858.1	42.3	8.1	0.0	(D)
Percent of total.....	100.0	0.4	4.5	15.6	8.0	16.1	14.7	11.4	20.4	8.4	0.4	0.1	0.0	(D)
Value of shipments.....million dollars..	1,509.3	1.9	28.6	152.9	96.4	216.2	223.5	197.1	397.4	183.4	9.8	2.1	0.0	(D)
Percent of total.....	100.0	0.1	1.9	10.1	6.4	14.3	14.8	13.1	26.3	12.2	0.7	0.1	0.0	(D)
Mountain:														
Quantity shipped.....billion cu. ft. <sup>3</sup> ..	1,108.6	1.7	50.6	271.6	309.9	254.1	116.1	36.4	58.9	4.4	4.9	0.0	(D)	0.0
Percent of total.....	100.0	0.1	4.6	24.5	28.0	22.9	10.4	3.3	5.3	0.4	0.5	0.0	(D)	0.0
Value of shipments.....million dollars..	137.6	0.1	3.6	26.7	37.3	33.2	17.5	6.0	11.0	0.9	1.3	0.0	(D)	0.0
Percent of total.....	100.0	0.1	2.6	19.4	27.2	24.2	12.6	4.4	8.0	0.6	0.9	0.0	(D)	0.0
Pacific:														
Quantity shipped.....billion cu. ft. <sup>3</sup> ..	507.8	0.5	0.0	0.8	8.1	0.2	1.7	0.4	2.1	0.6	78.5	259.0	52.3	103.6
Percent of total.....	100.0	0.1	0.0	0.2	1.6	0.0	0.3	0.1	0.4	0.1	15.5	51.0	10.3	20.4
Value of shipments.....million dollars..	165.7	0.0	0.0	0.1	1.0	0.0	0.3	0.1	0.4	0.1	19.9	77.7	17.8	48.3
Percent of total.....	100.0	0.0	0.0	0.1	0.6	0.0	0.2	0.1	0.2	0.1	12.0	46.9	10.7	29.1
Delivered to Consumers (Domestic, Commercial, and Industrial, Including Deliveries to own Refineries)														
United States, total:														
Quantity shipped.....billion cu. ft. <sup>3</sup> ..	857.1	0.9	50.8	68.5	24.0	188.1	121.3	90.0	146.0	12.8	19.7	81.5	36.1	17.4
Percent of total.....	100.0	0.1	5.9	8.0	2.8	22.0	14.2	10.5	17.0	1.5	2.3	9.5	4.2	2.0
Value of shipments.....million dollars..	153.1	0.0	3.6	6.3	2.8	25.0	18.0	14.9	27.8	2.7	4.8	24.8	13.4	9.0
Percent of total.....	100.0	0.0	2.3	4.1	1.8	16.3	11.8	9.7	18.2	1.8	3.1	16.2	8.8	5.9
Middle Atlantic:														
Quantity shipped.....billion cu. ft. <sup>3</sup> ..	29.8	0.0	0.0	0.7	0.0	0.0	0.1	0.0	0.4	0.0	0.5	11.2	14.9	2.0
Percent of total.....	100.0	0.0	0.0	2.4	0.0	0.0	0.3	0.0	1.3	0.0	1.7	37.6	50.0	6.7
Value of shipments.....million dollars..	10.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	3.1	5.6	1.0
Percent of total.....	100.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	31.0	56.0	10.0
East North Central:														
Quantity shipped.....billion cu. ft. <sup>3</sup> ..	18.1	0.6	0.0	0.1	0.0	0.0	1.7	(D)	0.3	0.0	3.8	9.1	2.5	(D)
Percent of total.....	100.0	3.3	0.0	0.5	0.0	0.0	9.4	(D)	1.7	0.0	21.0	50.3	13.8	(D)
Value of shipments.....million dollars..	4.8	0.0	0.0	0.0	0.0	0.0	0.3	(D)	0.1	0.0	0.9	2.5	1.0	(D)
Percent of total.....	100.0	0.0	0.0	0.0	0.0	0.0	6.3	(D)	2.1	0.0	18.7	52.1	20.8	(D)
West North Central:														
Quantity shipped.....billion cu. ft. <sup>3</sup> ..	53.8	0.0	0.2	14.3	0.1	0.9	(D)	37.3	1.0	0.0	0.0	0.0	0.0	0.0
Percent of total.....	100.0	0.0	0.4	26.6	0.2	1.7	(D)	69.3	1.8	0.0	0.0	0.0	0.0	0.0
Value of shipments.....million dollars..	8.0	0.0	0.0	1.6	0.0	0.1	(D)	6.1	0.2	0.0	0.0	0.0	0.0	0.0
Percent of total.....	100.0	0.0	0.0	20.0	0.0	1.3	(D)	76.2	2.5	0.0	0.0	0.0	0.0	0.0
South Atlantic:														
Quantity shipped.....billion cu. ft. <sup>3</sup> ..	30.5	0.0	0.0	0.0	0.0	0.0	0.1	0.0	3.8	(D)	13.2	7.3	0.8	5.3
Percent of total.....	100.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	12.5	(D)	43.3	23.9	2.6	17.4
Value of shipments.....million dollars..	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	(D)	3.3	2.0	0.3	2.8
Percent of total.....	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7	(D)	36.2	22.0	3.3	30.8
East South Central:														
Quantity shipped.....billion cu. ft. <sup>3</sup> ..	10.5	0.0	0.0	0.0	0.0	3.3	0.0	(D)	6.3	(D)	0.0	0.9	0.0	(D)
Percent of total.....	100.0	0.0	0.0	0.0	0.0	31.4	0.0	(D)	60.0	(D)	0.0	8.6	0.0	(D)
Value of shipments.....million dollars..	2.0	0.0	0.0	0.0	0.0	0.4	0.0	(D)	1.3	(D)	0.0	0.3	0.0	(D)
Percent of total.....	100.0	0.0	0.0	0.0	0.0	20.0	0.0	(D)	65.0	(D)	0.0	15.0	0.0	(D)
West South Central:														
Quantity shipped.....billion cu. ft. <sup>3</sup> ..	612.7	0.3	35.4	47.7	22.9	181.6	118.3	47.9	136.0	11.0	1.2	10.4	0.0	(D)
Percent of total.....	100.0	0.1	5.8	7.8	3.7	29.6	19.3	7.8	22.2	1.8	0.2	1.8	0.0	(D)
Value of shipments.....million dollars..	92.6	0.0	2.6	4.0	2.7	24.2	17.6	8.0	25.8	2.3	0.3	5.1	0.0	(D)
Percent of total.....	100.0	0.0	2.8	4.3	2.9	26.1	19.0	8.6	28.0	2.5	0.3	5.2	0.0	(D)
See footnotes at end of table														

TABLE 6C. Shipments of Primary Products Distributed by Unit Values,  
by Geographic Areas: 1963—Continued

Product, item, and geographic area <sup>2</sup>	Shipments by average value per thousand cu. ft.													
	Total	Less than 4.9¢	4.9¢ to 7.9¢	8.0¢ to 11.1¢	11.2¢ to 12.5¢	12.6¢ to 14.1¢	14.2¢ to 15.9¢	16.0¢ to 17.9¢	18.0¢ to 20.4¢	20.5¢ to 22.9¢	23.0¢ to 25.9¢	26.0¢ to 33.4¢	33.5¢ to 42.9¢	43.0¢ and over
NATURAL GAS—Con.														
Delivered to Consumers (Domestic, Commercial, and Industrial, including Deliveries to own Refineries)														
Mountain:														
Quantity shipped.....billion cu. ft. <sup>3</sup> ..	30.1	0.0	15.2	5.7	1.0	3.1	1.5	3.6	0.0	0.0	0.0	0.0	0.0	0.0
Percent of total.....	100.0	0.0	50.5	18.9	3.3	10.3	5.0	12.0	0.0	0.0	0.0	0.0	0.0	0.0
Value of shipments.....million dollars..	2.9	0.0	1.0	0.6	0.1	0.4	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Percent of total.....	100.0	0.0	34.5	20.7	3.4	13.8	6.9	20.7	0.0	0.0	0.0	0.0	0.0	0.0
Pacific:														
Quantity shipped.....billion cu. ft. <sup>3</sup> ..	71.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	52.5	<u>18.1</u>	(D)
Percent of total.....	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	73.3	<u>25.3</u>	(D)
Value of shipments.....million dollars..	23.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	16.8	<u>6.7</u>	(D)
Percent of total.....	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	70.9	<u>28.2</u>	(D)

Note: Data which cannot be shown without disclosing information for individual companies have been combined with figures for other size classes. A (D) appears in the column where the figure has been omitted and the combined figure is underlined and shown in the size-class to the left.

(D) Withheld to avoid disclosing figures for individual companies.

<sup>1</sup>The "average values" are based on the entire shipments of the specified product by each establishment. Thus they are representative of varied average prices among establishments but not variations within an establishment.

<sup>2</sup>Respondents were requested to include, besides the value of residue gas, the producers' realization from all products contained in the gas delivered to natural gas liquids plants.

<sup>3</sup>Represents volumes adjusted to a pressure base of 14.65 pounds absolute at 60°F.

TABLE 6D. Quantity of Shipments of the Industry, by County: 1963 and 1958

Division, State, and county	Quantity of shipments				Division, State, and county	Quantity of shipments			
	Crude petroleum (1,000 barrels)		Natural gas (million cubic feet)			Crude petroleum (1,000 barrels)		Natural gas (million cubic feet)	
	1963	1958	1963	1958		1963	1958	1963	1958
United States, total....	2,701,978	1,236,212	13,840,467	10,134,236	East North Central--Con.				
Middle Atlantic, total.....	6,807	8,163	90,751	84,427	Illinois--Continued				
New York, total.....	1,977	1,652	3,437	2,710	Richland.....	855	1,936	165	2
Allegany.....	1,155	1,035	712	696	Saline.....	398	1,006	36	297
Cattaraugus.....	734	388	2,060	948	Wabash.....	3,195	3,360	966	79
Other counties.....	48	76	515	860	Washington.....	607	836	99	-
Undistributed by county.....	40	153	150	206	Wayne.....	3,524	6,328	66	105
Pennsylvania, total.....	4,830	6,511	87,314	81,717	White.....	5,964	6,920	1,656	373
Allegheny.....	141	96	1,205	1,497	Other counties.....	3,566	855	1,122	15
Armstrong.....	24	-	12,787	10,088	Undistributed by county.....	1,316	3,040	-	1,463
Bedford.....	-	(2)	8,378	(2)	Michigan, total.....	16,642	7,669	30,446	10,810
Butler.....	89	59	1,798	486	Allegan.....	255	179	440	3,096
Cameron.....	(2)	(2)	4,046	(2)	Arenac.....	303	533	-	50
Clarion.....	63	9	2,960	2,987	Bay.....	235	635	-	-
Clearfield.....	-	9	6,686	18,936	Calhoun.....	2,619	(2)	3,199	(2)
Elk.....	52	37	5,374	7,006	Clare.....	539	584	227	1,015
Fayette.....	-	(2)	1,857	(2)	Gladwin.....	506	424	9	-
Greene.....	50	92	3,065	3,576	Hillsdale.....	3,163	(2)	2,209	(2)
Indiana.....	-	-	8,081	8,715	Isabella.....	482	830	14	199
Jefferson.....	4	2	7,816	5,894	Jackson.....	1,888	(2)	2,151	(2)
McKean.....	3,510	4,766	1,965	1,688	Kent.....	252	(2)	16	(2)
Potter.....	6	86	1,172	3,985	Macomb.....	286	(2)	4,179	(2)
Somerset.....	-	(2)	4,873	(2)	Mason.....	337	(2)	13	(2)
Venango.....	347	423	596	417	Montcalm.....	312	372	4	52
Warren.....	319	268	217	185	Ogemaw.....	252	404	542	614
Washington.....	163	131	2,316	2,647	Osceola.....	253	663	48	321
Westmoreland.....	14	4	9,912	5,617	Roscommon.....	227	(2)	1,025	(2)
Other counties.....	2	157	2,065	7,520	St. Clair.....	789	(2)	12,307	(2)
Undistributed by county.....	46	419	145	3,386	Other counties.....	3,554	2,674	3,256	5,408
East North Central, total...	106,760	99,865	70,556	45,265	Undistributed by county.....	390	371	807	55
Ohio, total.....	5,954	5,325	33,776	29,370	West North Central, total.	151,475	141,762	765,184	559,481
Coshocton.....	423	902	1,284	1,566	North Dakota, total.....	22,647	313,853	431,216	414,156
Hocking.....	496	(2)	1,118	(2)	Billings.....	644	(2)	-	(2)
Holmes.....	289	324	2,851	2,012	Bottineau.....	2,075	828	-	-
Knox.....	160	157	989	669	Bowman.....	1,019	(2)	-	(2)
Licking.....	520	500	897	778	Burke.....	5,350	1,065	10,339	152
Medina.....	355	204	1,981	1,282	McKenzie.....	6,510	4,109	7,603	2,582
Monroe.....	147	114	663	515	Renville.....	1,117	(2)	-	(2)
Morrow.....	919	(2)	62	(2)	Williams.....	5,547	5,460	13,269	7,930
Muskingum.....	231	352	1,330	1,370	Other counties.....	295	2,334	5	1,892
Perry.....	534	378	1,052	1,042	Undistributed by county.....	90	57	-	1,600
Portage.....	107	(2)	5,515	(2)	Nebraska, total.....	20,316	317,962	7,582	16,629
Washington.....	447	247	975	1,848	Barner.....	4,551	3,801	111	(2)
Wayne.....	295	1,221	2,548	3,559	Cheyenne.....	2,834	4,245	5,512	7,130
Other counties.....	755	470	11,271	12,677	Hitchcock.....	205	(2)	-	(2)
Undistributed by county.....	276	456	1,240	2,052	Kimball.....	5,401	8,600	285	1,804
Indiana, total.....	11,911	10,398	141	467	Morrill.....	1,304	552	-	-
Gibson.....	3,050	3,313	74	181	Red Willow.....	3,245	(2)	-	(2)
Knox.....	395	189	-	-	Scotts Bluff.....	585	(2)	42	(2)
Pike.....	543	1,225	4	-	Other counties.....	1,719	139	1,330	7,695
Posey.....	3,658	3,087	20	126	Undistributed by county.....	472	625	302	-
Spencer.....	303	185	-	-	Kansas, total.....	108,225	109,800	726,359	528,696
Sullivan.....	179	254	-	-	Allen.....	864	446	368	211
Vanderburgh.....	1,478	1,297	34	-	Anderson.....	270	381	-	-
Other counties.....	2,024	246	-	1	Barber.....	1,036	1,947	42,156	43,060
Undistributed by county.....	281	602	9	159	Barton.....	8,922	13,413	1,830	4,555
Illinois, total.....	72,253	76,473	6,193	4,618	Butler.....	6,610	7,125	151	74
Bond.....	162	532	(2)	-	Chautauque.....	914	691	-	380
Christian.....	775	884	33	-	Clark.....	201	249	10,742	5,854
Clark.....	326	548	33	4	Comanche.....	113	(2)	9,064	(2)
Clay.....	2,431	2,994	234	21	Cowley.....	2,880	3,675	1,105	402
Clinton.....	1,439	4,060	101	19	Decatur.....	315	397	-	-
Coles.....	785	465	100	4	Edwards.....	371	124	2,753	1,090
Crawford.....	3,786	3,093	62	-	Elk.....	222	233	256	394
Cumberland.....	326	694	-	-	Ellis.....	8,168	8,567	447	1,310
De Witt.....	278	(2)	-	(2)	Ellsworth.....	1,380	1,919	14	57
Edward.....	1,186	1,334	37	19	Finney.....	1,804	511	53,435	36,367
Effingham.....	395	622	66	2	Graham.....	4,522	6,218	17	-
Fayette.....	14,840	13,050	139	417	Grant.....	34	57	150,051	149,799
Franklin.....	1,238	1,951	7	-	Greenwood.....	2,933	5,901	116	9,940
Gallatin.....	1,611	2,686	5	77	Hamilton.....	65	(2)	5,776	(2)
Hamilton.....	3,496	2,729	414	1,059	Harfer.....	1,012	867	3,923	4,632
Jasper.....	361	1,927	3	-	Harvey.....	835	337	555	252
Jefferson.....	2,613	2,595	367	95	Haskell.....	1,679	276	35,590	20,643
Lawrence.....	6,842	4,993	37	-	Hodgeman.....	1,750	236	-	-
Macon.....	215	(2)	66	(2)	Johnson.....	281	(2)	2	(2)
Madison.....	218	267	67	-	Kearny.....	52	(2)	46,367	50,219
Marion.....	9,505	6,768	312	567	Kingman.....	2,981	2,109	16,481	8,027
					Kiowa.....	367	828	23,541	2,795
					McPherson.....	2,014	3,544	292	541

See footnotes at end of table.

TABLE 6D. Quantity of Shipments of the Industry, by County: 1963 and 1958—Continued

Division, State, and county	Quantity of shipments				Division, State, and county	Quantity of shipments			
	Crude petroleum (1,000 barrels)		Natural gas (million cubic feet)			Crude petroleum (1,000 barrels)		Natural gas (million cubic feet)	
	1963	1958	1963	1958		1963	1958	1963	1958
West North Central—Con.					East South Central—Con.				
Kansas—Continued					Kentucky—Continued				
Marion.....	1,386	2,016	4,709	276	Pike.....	40	(2)	27,714	24,671
Meade.....	656	671	12,926	7,832	Powell.....	301	(2)	-	(2)
Miami.....	299	465	25	(2)	Union.....	1,535	1,486	-	-
Montgomery.....	1,287	450	42	75	Webster.....	1,280	963	29	(2)
Morris.....	295	(2)	275	-	Other counties.....	1,596	982	3,185	21,563
Morton.....	2,092	674	77,043	63,468	Undistributed by county.....	578	2,711	-	-
Neosho.....	1,137	313	10	74	Tennessee.....	34	36	-	6189
Ness.....	652	410	4	(2)	Alabama, total.....	8,651	35,373	-	(6)
Norton.....	687	981	-	-	Choctaw.....	214	320	-	-
Pawnee.....	939	1,398	1,899	3,624	Escambia.....	518	762	-	(6)
Phillips.....	2,030	1,937	5	(2)	Mobile.....	7,733	4,120	-	-
Pratt.....	1,316	2,174	2,333	365	Other counties.....	125	14	-	(6)
Rawlins.....	708	(2)	-	(2)	Undistributed by county.....	61	157	-	-
Reno.....	956	1,022	3,607	3,769	Mississippi, total.....	59,745	38,956	168,783	148,670
Rice.....	4,902	4,952	364	583	Adams.....	5,301	5,303	27,032	(2)
Rooks.....	5,016	5,033	41	(2)	Amite.....	1,049	(2)	214	(2)
Rush.....	134	372	1,743	1,638	Clarke.....	535	173	180	-
Russell.....	7,662	7,664	802	154	Forrest.....	594	158	30,354	40,279
Saline.....	1,259	200	42	(2)	Franklin.....	908	1,150	1,262	(2)
Sedgwick.....	4,115	2,473	15,001	(2)	Hinds.....	2,467	(2)	340	(2)
Seward.....	1,094	36	26,752	23,751	Jasper.....	5,211	4,782	3,385	4,354
Sheridan.....	320	404	-	-	Jefferson.....	1,310	1,757	755	(2)
Stafford.....	4,821	4,957	1,732	1,330	Jefferson Davis.....	110	(2)	26,755	23,342
Stanton.....	25	(2)	24,178	5,972	Jones.....	6,444	(2)	2,873	(2)
Stevens.....	619	(2)	136,592	69,268	Lamar.....	5,281	1,127	7,578	16,806
Sumner.....	2,276	2,080	218	262	Lincoln.....	2,259	3,557	59	(2)
Trego.....	1,252	1,582	12	-	Madison.....	604	(2)	-	(2)
Wabaunsee.....	231	(2)	-	-	Marion.....	1,123	454	19,713	4,182
Wilson.....	336	147	470	(2)	Monroe.....	11	(2)	4,639	(2)
Woodson.....	578	601	10	16	Pearl River.....	324	282	11,644	10,168
Other counties.....	1,321	1,812	5,743	2,303	Pike.....	10,911	351	9,165	-
Undistributed by county.....	5,049	4,925	4,749	3,334	Simpson.....	1,136	(2)	403	(2)
Missouri and South Dakota.....	287	3121	(4)	(4)	Smith.....	2,937	(2)	1,579	(2)
South Atlantic, total.....	3,715	2,519	186,577	176,449	Walshall.....	1,284	(2)	17,192	(2)
West Virginia, total.....	3,714	2,519	182,979	169,481	Wayne.....	3,112	4,046	62	(2)
Boone.....	27	-	6,599	4,901	Wilkinson.....	361	789	1	-
Braxton.....	32	(2)	2,126	1,546	Yazoo.....	3,023	3,614	-	-
Cabell.....	15	-	2,841	1,585	Other counties.....	3,037	8,796	3,459	48,608
Calhoun.....	581	151	7,181	6,326	Undistributed by county.....	413	2,617	139	931
Clay.....	64	66	3,443	2,230	West South Central, total...	1,682,014	1,439,391	10,771,955	7,676,958
Doddridge.....	218	72	9,556	1,644	Arkansas, total.....	20,650	27,153	65,396	33,131
Gilmer.....	248	62	5,810	1,957	Columbia.....	3,881	6,969	7,074	4,921
Harrison.....	130	102	7,848	10,595	Crawford.....	-	(2)	5,906	(2)
Jackson.....	13	76	2,061	3,148	Franklin.....	-	-	21,557	13,718
Kanawha.....	265	220	18,591	13,195	Johnson.....	-	(2)	6,930	(2)
Lewis.....	162	(2)	10,125	9,265	Lafayette.....	3,334	4,326	9,305	(2)
Lincoln.....	328	(2)	11,991	16,160	Logan.....	-	(2)	2,363	(2)
Logan.....	-	(2)	6,869	13,332	Miller.....	2,600	1,852	1,245	(2)
McDowell.....	-	(2)	3,011	(2)	Nevada.....	817	589	281	(2)
Mingo.....	(2)	7	8,481	11,433	Ouachita.....	3,426	5,659	67	188
Pleasants.....	50	(2)	3,770	(2)	Sebastian.....	-	(2)	3,693	(2)
Preston.....	-	(2)	2,568	(2)	Union.....	5,337	6,828	881	1,115
Putnam.....	5	-	2,288	6,442	Other counties.....	1,009	151	6,094	13,021
Ritchie.....	546	173	6,456	3,317	Undistributed by county.....	246	779	-	168
Tyler.....	90	128	6,105	812	Louisiana, total.....	503,490	312,733	3,695,437	2,229,631
Upshur.....	-	-	4,942	2,860	North Louisiana, total.....	53,638	(NA)	482,502	(NA)
Wayne.....	18	28	9,904	8,668	Bienville.....	343	164	36,976	35,510
Wetzel.....	96	107	2,454	1,260	Bossier.....	3,857	2,424	89,332	100,890
Wood.....	89	(2)	6,045	(2)	Caddo.....	12,292	6,700	43,705	45,602
Other counties.....	5401	51,081	22,300	35,212	Caldwell.....	-	(2)	10,419	(2)
Undistributed by county.....	336	246	9,614	13,593	Cathahoula.....	2,032	689	850	(2)
Maryland, Virginia, and Florida.	(2)	(2)	3,598	6,968	Clabornne.....	5,013	3,736	26,855	31,435
East South Central, total...	87,314	59,538	237,289	216,297	Concordia.....	3,839	4,434	3,453	3,872
Kentucky, total.....	18,884	315,195	68,506	67,438	De Soto.....	1,606	571	34,656	62,559
Butler.....	244	269	331	-	Franklin.....	402	365	1,257	(2)
Christian.....	331	374	66	-	Jackson.....	55	(2)	2,774	(2)
Davless.....	2,105	1,207	(2)	-	La Salle.....	4,552	4,133	3,399	(2)
Floyd.....	79	(2)	14,677	12,062	Lincoln.....	330	400	42,777	57,010
Hancock.....	250	188	-	-	Morehouse.....	(2)	-	8,947	11,596
Henderson.....	3,878	2,792	1	-	Ouachita.....	1,586	1,157	29,888	39,518
Hopkins.....	1,503	(2)	1,753	(2)	Richland.....	4,364	(2)	3,967	4,090
Johnson.....	466	149	349	165	Sabine.....	3,267	132	79	(2)
Knott.....	10	24	11,719	8,467	Tensas.....	3,926	2,387	13,257	3,509
Lawrence.....	202	(2)	904	510	Union.....	1,777	145	63,156	53,387
Lee.....	1,582	676	(2)	(2)	Webster.....	2,368	2,444	60,381	58,322
McLean.....	723	632	81	(2)					
Magoffin.....	891	1,391	26	(2)					
Martin.....	11	14	5,909	(2)					
Metcalfe.....	174	(2)	-	(2)					
Muhlenberg.....	365	482	1,762	(2)					
Ohio.....	740	855	-	(2)					

See footnotes at end of table.

TABLE 6D. Quantity of Shipments of the Industry, by County: 1963 and 1958—Continued

Division, State, and county	Quantity of shipments				Division, State, and county	Quantity of shipments			
	Crude petroleum (1,000 barrels)		Natural gas (million cubic feet)			Crude petroleum (1,000 barrels)		Natural gas (million cubic feet)	
	1963	1958	1963	1958		1963	1958	1963	1958
West South Central—Con.					West South Central—Con.				
Louisiana—Continued					Oklahoma—Continued				
North Louisiana—Continued					Pittsburg.....	-	(2)	937	(2)
Winn.....	695	(7)	173	(7)	Pontotoc.....	2,736	2,628	7,702	2,854
Other counties.....	-	(7)	105	(7)	Pottawatomie.....	2,979	3,214	4,511	2,005
Undistributed by county.....	2,922	(7)	6,096	(7)	Rogers.....	556	2,046	14	(2)
South Louisiana, total.....	449,852	(NA)	3,212,935	(NA)	Seminole.....	6,355	7,156	19,144	10,828
Acadia.....	8,738	7,363	174,707	119,393	Stephens.....	18,549	21,324	54,133	41,916
Allen.....	1,813	(2)	9,357	17,631	Texas.....	3,020	410	133,597	137,566
Ascension.....	567	(2)	3,598	(2)	Tillman.....	311	583	1	(2)
Assumption.....	3,081	1,926	54,468	35,536	Tulsa.....	1,599	1,400	29,034	772
Avoynes.....	571	601	2,939	632	Washington.....	3,590	3,627	15,034	(2)
Beauregard.....	2,637	3,663	13,053	13,810	Washita.....	71	103	5,443	(2)
Calcasieu.....	5,046	6,936	35,035	44,316	Washita.....	221	(2)	7,025	(2)
Cameron.....	16,045	9,924	275,641	233,395	Woods.....	5,315	(2)	27,091	(2)
East Baton Rouge.....	892	1,194	954	2,819	Woodward.....	696	1,866	8,404	20,316
Evangeline.....	1,622	1,783	17,520	3,618	Other counties.....	9,330	10,584	34,694	9,570
Iberia.....	14,002	12,343	79,333	35,355	Undistributed by county.....				
Iberville.....	7,256	5,475	19,712	15,343	Texas, total.....	957,232	911,894	5,892,932	4,769,250
Jefferson.....	11,991	7,472	36,135	23,198	Texas Gulf Coast A, total....	137,421	(NA)	1,062,335	(NA)
Jefferson Davis.....	5,010	3,426	160,644	102,164	Austin.....	1,757	1,434	8,691	4,937
Lafayette.....	3,002	354	44,296	7,814	Brazoria.....	18,141	21,050	312,694	272,084
Lafourche.....	37,079	29,935	198,570	129,615	Chambers.....	16,009	13,479	75,577	89,299
Orleans.....	283	(2)	139	(2)	Colorado.....	1,468	1,484	47,227	51,297
Plaquemines.....	66,836	66,619	208,620	85,006	Fort Bend.....	273	235	13	(2)
Pointe Coupee.....	1,295	(2)	8,593	(2)	Galveston.....	7,025	7,881	17,438	21,394
Rapides.....	214	408	484	(2)	Hardin.....	15,435	8,961	49,352	10,663
Saint Bernard.....	697	(2)	1,052	(2)	Harris.....	6,247	7,046	18,153	21,931
Saint Charles.....	8,411	6,068	43,575	(2)	Jasper.....	16,908	22,067	43,026	57,826
Saint James.....	951	1,016	6,898	(2)	Jefferson.....	816	449	4,896	2,237
Saint John the Baptist.....	996	(2)	(2)	(2)	Liberty.....	11,914	6,602	99,891	89,396
Saint Landry.....	6,723	5,451	37,777	49,882	Madison.....	10,178	13,554	17,850	24,787
Saint Martin.....	12,049	8,247	117,108	90,132	Montgomery.....	406	90	6,408	(2)
Saint Mary.....	29,642	13,487	235,070	61,473	Newton.....	8,883	4,272	174,985	90,412
Saint Pierre.....	54,572	24,827	553,531	214,775	Orange.....	6,323	6,969	29,870	18,542
Terrebonne.....	10,073	5,806	217,905	156,417	Polk.....	1,952	1,424	8,844	5,680
Vermilion.....	327	217	399	(2)	San Jacinto.....	1,365	2,353	25,413	40,828
West Baton Rouge.....	327	217	399	(2)	Tyler.....	1,277	1,323	2,252	3,118
Offshore.....	143,337	26,463	653,765	222,182	Wharton.....	517	467	4,352	3,519
Other counties.....	94	78,132	1,139	749,164	Offshore.....	793	620	21,810	2,710
Undistributed by county.....	-	723,575	918	78,661	Other counties.....	4,767	4,777	67,399	78,620
Oklahoma, total.....	199,585	187,611	1,118,190	644,946	Undistributed by county....	472	433	3,823	15,526
Alfalfa.....	1,003	616	6,133	1,487	Other counties.....	2,933	(8)	22,050	(8)
Beaver.....	5,424	1,191	86,327	25,218	Undistributed by county.....	1,562	(8)	321	(8)
Beckham.....	965	3,324	63,277	2,842					
Blaine.....	161	(2)	8,610	(2)	Texas Gulf Coast B, total....	48,324	(NA)	759,792	(NA)
Bryan.....	709	(2)	3,045	(2)	Aransas.....	1,839	2,505	41,290	25,258
Caddo.....	3,293	4,497	8,269	9,491	Bee.....	1,618	1,506	55,007	48,090
Canadian.....	51	(2)	1,680	(2)	Calhoun.....	3,439	1,941	83,087	56,129
Carter.....	17,891	16,120	30,230	28,495	De Witt.....	1,919	2,281	30,376	23,514
Cimarron.....	210	120	13,586	11,694	Goliad.....	1,715	2,411	43,044	47,514
Cleveland.....	2,852	4,177	10,527	18,161	Jackson.....	10,327	10,319	108,272	61,342
Coal.....	511	412	9,823	1,628	Karnes.....	3,494	2,040	19,500	4,596
Comanche.....	304	211	2,645	759	Lavaca.....	551	748	28,040	50,321
Cotton.....	1,553	1,193	65	(2)	Live Oak.....	2,351	2,129	100,080	61,032
Creek.....	8,927	8,148	13,951	7,035	Refugio.....	15,292	13,384	170,586	143,873
Custer.....	150	(2)	7,892	(2)	Victoria.....	5,672	4,192	79,541	101,452
Dewey.....	1,146	(2)	11,006	(2)	Undistributed by county....	107	(8)	969	(8)
Ellis.....	134	(2)	2,108	(2)					
Garfield.....	2,817	1,381	12,420	5,481	South Texas, total.....	74,180	(NA)	1,051,384	(NA)
Garvin.....	16,008	19,092	132,403	153,528	Brooks.....	6,374	3,796	71,401	105,104
Grady.....	4,525	5,183	21,456	23,250	Cameron.....	-	(8)	7,223	(8)
Grant.....	1,105	821	12,309	5,235	Duval.....	6,783	9,009	54,766	46,348
Harper.....	916	326	58,595	1,384	Hidalgo.....	2,682	1,027	230,252	147,286
Haskell.....	13	(2)	5,221	(2)	Jim Hogg.....	2,534	1,730	33,750	1,528
Hughes.....	1,597	2,097	15,224	7,407	Jim Wells.....	18,890	12,093	116,407	117,812
Jackson.....	265	153	2	-	Kenedy.....	60	(8)	14,303	(8)
Jefferson.....	1,106	1,194	3,845	644	Kleberg.....	6,868	3,743	108,739	62,895
Kay.....	1,981	2,282	2,228	2,205	Nueces.....	9,524	10,681	212,641	192,594
Kingfisher.....	8,435	336	39,881	536	San Patricio.....	9,710	9,850	64,089	55,221
Latimer.....	4	(2)	627	(2)	Starr.....	4,905	5,023	67,188	47,406
Le Flore.....	25	(2)	5,775	(2)	Webb.....	1,861	1,106	17,580	5,309
Lincoln.....	6,304	4,425	14,488	11,756	Willacy.....	1,839	1,739	5,702	4,982
Logan.....	1,648	2,749	4,775	8,547	Zapata.....	497	649	24,256	772
Love.....	2,055	603	6,905	543	Undistributed by county.....	1,653	(8)	23,087	(8)
McClain.....	4,590	4,106	38,714	15,902					
Major.....	2,408	382	27,529	7,104	Southwest Texas, total.....	23,404	(NA)	121,959	(NA)
Marshall.....	1,589	2,127	4,897	1,608	Atascosa.....	3,157	3,588	38,664	15,652
Murray.....	431	(2)	527	(2)	Bexar.....	4,457	235	7,225	(2)
Muskogee.....	1,018	167	10,668	(2)	Caldwell.....	3,281	3,516	(2)	(2)
Noble.....	1,956	2,825	8,310	8,339	Dimmit.....	256	495	344	(2)
Nowata.....	1,700	3,687	3,042	82	Frio.....	786	1,590	14,625	11,366
Okfuskee.....	2,481	2,774	4,837	1,798	Gonzales.....	264	(2)	-	(2)
Oklahoma.....	9,996	7,615	43,375	46,333	Guadalupe.....	3,001	4,049	50	178
Okmulgee.....	1,147	1,600	3,838	288	La Salle.....	148	261	3,324	(2)
Ossage.....	19,579	20,612	6,042	7,805	McMullen.....	1,697	627	49,822	15,919
Pawnee.....	1,259	1,836	84	344					
Payne.....	2,015	4,288	4,235	2,210					

See footnotes at end of table.

TABLE 6D. Quantity of Shipments of the Industry, by County: 1963 and 1958—Continued

Division, State, and county	Quantity of shipments				Division, State, and county	Quantity of shipments			
	Crude petroleum (1,000 barrels)		Natural gas (million cubic feet)			Crude petroleum (1,000 barrels)		Natural gas (million cubic feet)	
	1963	1958	1963	1958		1963	1958	1963	1958
West South Central--Con.					West South Central--Con.				
Texas--Continued					Texas--Continued				
Southwest Texas--Continued					West Texas A, total.....	385,113	(NA)	980,492	(NA)
Maverick.....	644	(2)	1,244	(2)	Andrews.....	67,797	56,121	73,403	95,644
Medina.....	109	122	-	-	Borden.....	7,431	9,607	10,061	7,598
Milan.....	2,715	(2)	-	(2)	Cochran.....	4,673	5,681	11,862	8,610
Travis.....	1,041	(2)	-	(2)	Crane.....	31,718	30,156	95,855	41,636
Val Verde.....	267	(2)	4,298	(2)	Culberson.....	599	250	3,234	-
Wilson.....	560	618	16	943	Dawson.....	7,120	3,882	1,133	1,265
Zavala.....	302	67	1,328	(2)	Ector.....	62,414	54,238	132,118	127,875
Other counties.....	648	(8)	445	(8)	Gaines.....	25,326	21,026	35,557	18,406
Undistributed by county.....	71	(8)	574	(8)	Garza.....	4,686	4,453	321	(2)
North Central Texas A, total..	68,808	(NA)	119,753	(NA)	Glasscock.....	1,982	1,854	8,444	8,897
Archer.....	6,647	8,052	1,417	2,798	Hale.....	1,479	(2)	136	(2)
Baylor.....	1,232	2,384	231	840	Hockley.....	13,253	11,861	28,923	25,006
Clay.....	3,531	5,301	245	1,472	Howard.....	11,788	12,674	5,097	5,027
Cooke.....	8,646	7,457	1,914	2,500	Kent.....	4,626	6,630	447	267
Denton.....	157	108	1,929	(2)	King.....	906	934	1,211	393
Foard.....	707	536	6	(2)	Loving.....	3,395	1,819	5,394	1,411
Hardeman.....	1,442	(2)	489	(2)	Lubbock.....	679	662	5,951	291
Jack.....	3,647	3,839	22,149	20,281	Lynn.....	584	255	17	-
Knox.....	1,806	1,875	149	(2)	Martin.....	3,453	896	1,394	(2)
Montague.....	5,617	5,074	5,673	3,522	Midland.....	21,911	12,051	154,679	48,145
Wichita.....	19,942	9,215	2,553	11,697	Mitchell.....	1,695	1,934	467	454
Wilbarger.....	4,958	4,918	50	684	Motley.....	296	(2)	(2)	(2)
Wise.....	3,041	2,626	78,332	42,680	Pecos.....	11,289	12,059	191,761	94,955
Young.....	5,563	6,116	3,153	6,446	Reeves.....	2,663	608	9,245	3,696
Undistributed by county.....	1,872	(8)	1,462	(8)	Scurry.....	29,100	33,244	17,122	11,717
North Central Texas B, total..	47,003	(NA)	85,800	(NA)	Sterling.....	466	509	599	651
Brown.....	324	285	1,148	859	Terry.....	4,477	5,063	2,480	1,977
Callahan.....	2,098	2,048	705	617	Ward.....	23,009	18,239	29,161	7,515
Coleman.....	2,034	2,552	12,821	6,285	Winkler.....	19,101	18,666	92,062	56,865
Comanche.....	205	(2)	1,342	(2)	Yoakum.....	16,701	12,576	30,224	25,838
Eastland.....	991	671	4,195	6,370	Other counties.....	400	81,623	10,137	8163,413
Erath.....	44	(2)	8,112	(2)	Undistributed by county....	87	831,057	21,997	810,256
Fisher.....	4,028	4,608	8,439	3,335	West Texas B, total.....	37,378	(NA)	152,059	(NA)
Haskell.....	3,919	3,521	2,551	1,792	Coke.....	5,385	8,791	28,647	24,190
Jones.....	4,863	5,026	1,669	2,698	Concho.....	359	(2)	8	(2)
Nolan.....	4,732	6,744	8,831	11,535	Crockett.....	7,074	6,453	12,779	9,024
Polo Pinto.....	184	166	7,456	2,843	Irion.....	440	645	1,173	(2)
Parker.....	63	100	6,357	15,020	Menard.....	182	(2)	58	(2)
Shackelford.....	4,451	2,579	1,753	2,940	Reagan.....	4,463	6,870	14,522	39,105
Stephens.....	1,891	2,801	10,789	10,035	Runnels.....	3,213	3,490	5,903	5,518
Stonewall.....	4,873	6,450	4,558	5,946	Schlesinger.....	2,601	2,379	16,846	4,740
Taylor.....	9,421	3,817	3,940	219	Sutton.....	329	(2)	5,894	4,317
Throckmorton.....	2,630	4,062	234	910	Terrell.....	35	(2)	37,807	(2)
Other counties.....	176	(8)	737	(8)	Tom Green.....	2,082	1,957	10,206	605
Undistributed by county.....	76	(8)	163	(8)	Upton.....	10,434	13,520	17,527	38,867
East Texas A, total.....	32,809	(NA)	83,955	(NA)	Other counties.....	440	(8)	76	(8)
Dallas.....	7,003	(2)	5,507	(2)	Undistributed by county....	341	(8)	613	(8)
Ellis.....	247	(2)	-	(2)	Texas Panhandle, total.....	39,600	(NA)	892,212	(NA)
Freestone.....	553	186	13,538	10,773	Carson.....	3,768	3,648	89,978	110,351
Grayson.....	8,189	6,387	9,014	11,560	Collingsworth.....	19	(2)	14,015	(2)
Henderson.....	4,200	317	17,135	(2)	Gray.....	11,503	13,050	75,615	77,315
Hopkins.....	916	1,129	5,209	1,853	Hansford.....	2,414	1,191	59,007	63,893
Kaufman.....	486	677	15	-	Hartley.....	34	(2)	7,072	(2)
Leon.....	1,284	115	11,693	12,337	Hemphill.....	305	(2)	3,628	(2)
Limestone.....	247	289	5,261	1,446	Hutchinson.....	9,686	12,002	121,685	117,375
Navarro.....	934	1,444	752	(2)	Lipscomb.....	1,494	107	5,315	(2)
Tarrant.....	1,939	(2)	288	(2)	Moore.....	475	316	182,721	212,596
Van Zandt.....	4,889	5,691	2,321	2,093	Ochiltree.....	5,922	2,627	85,101	11,269
Other counties.....	80	(8)	1,839	(8)	Potter.....	1,486	-	117,712	27,414
Undistributed by county.....	1,842	(8)	11,383	(8)	Roberts.....	1,095	1,276	16,816	11,778
East Texas B, total.....	84,837	(NA)	583,191	(NA)	Sherman.....	20	(2)	97,497	161,208
Anderson.....	5,268	4,535	25,824	38,474	Wheeler.....	1,314	1,212	14,647	7,586
Camp.....	245	107	45	(2)	Other counties.....	59	(8)	1,300	(8)
Cass.....	1,439	1,834	5,345	7,478	Undistributed by county....	6	(8)	103	(8)
Cherokee.....	1,792	1,592	4,549	3,134	Mountain, total.....	343,009	304,544	1,137,760	949,770
Franklin.....	3,120	3,796	104	1,227	Montana, total.....	29,405	328,374	21,653	30,168
Gregg.....	26,631	29,534	89,076	30,948	Carbon.....	3,291	(2)	2,523	2,957
Harrison.....	2,120	2,072	50,193	64,792	Dawson.....	1,912	(2)	5	(2)
Houston.....	1,497	400	9,526	14,607	Fallon.....	8,977	(2)	2,502	(2)
Marion.....	1,062	2,874	8,726	5,177	Glacier.....	2,212	2,154	5,769	9,262
Panola.....	3,888	1,978	229,208	294,036	Liberty.....	138	(2)	4,037	(2)
Rusk.....	15,807	22,446	56,453	20,432	Musselshell.....	1,186	814	-	-
Shelby.....	43	4	12,743	9,654	Roosevelt.....	2,647	(2)	-	(2)
Smith.....	2,980	1,854	20,907	8,766	Rosebud.....	1,936	1,590	2	-
Titus.....	3,459	2,849	15	-	Sheridan.....	906	(2)	-	(2)
Upshur.....	1,630	2,826	1,924	3,440	Toole.....	879	798	2,983	(2)
Wood.....	13,658	14,825	32,530	8,499	Yellowstone.....	265	(2)	-	(2)
Other counties.....	87	(8)	807	(8)	Other counties.....	4,873	22,970	3,832	17,419
Undistributed by county.....	111	(8)	35,216	(8)	Undistributed by county....	183	48	-	530

See footnotes at end of table.



TABLE 6D. Quantity of Shipments of the Industry, by County: 1963 and 1958—Continued

Division, State, and county	Quantity of shipments				Division, State, and county	Quantity of shipments			
	Crude petroleum (1,000 barrels)		Natural gas (million cubic feet)			Crude petroleum (1,000 barrels)		Natural gas (million cubic feet)	
	1963	1958	1963	1958		1963	1958	1963	1958
West South Central--Con.					West South Central--Con.				
Wyoming, total.....	133,478	108,281	201,735	127,360	New Mexico--Continued				
Albany.....	771	(2)	-	(2)	West New Mexico, total.....	11,411	(NA)	367,777	(NA)
Big Horn.....	10,137	10,980	8,155	7,714	Rio Arriba.....	1,732	371	101,518	17,006
Campbell.....	5,652	717	1,136	(2)	San Juan.....	8,887	6,221	264,182	177,565
Carbon.....	2,590	(2)	3,163	431	Other counties.....	792	(9)	2,077	(9)
Converse.....	4,165	5,250	1,236	-	Undistributed by county.....	-	(9)	-	(9)
Crook.....	3,684	(2)	1,283	(2)	Utah, total.....	33,158	<sup>10</sup> 24,398	70,598	<sup>10</sup> 17,920
Fremont.....	12,069	14,062	16,957	17,310	Carbon.....	-	(2)	8,089	(2)
Hot Springs.....	18,956	11,793	273	(2)	Grand.....	371	(2)	8,577	(2)
Johnson.....	6,308	7,228	5,582	(2)	San Juan.....	25,249	20,286	26,477	856
Laramie.....	522	658	-	-	Uintah.....	7,538	3,990	25,830	(2)
Lincoln.....	111	(2)	4,282	(2)	Other counties.....	-	<sup>10</sup> 92	1,244	<sup>10</sup> 16,304
Netrona.....	14,050	11,738	4,181	(2)	Undistributed by county.....	-	<sup>10</sup> 30	381	<sup>10</sup> 760
Niobrara.....	812	931	393	721	Arizona and Nevada, total.....	136	( <sup>10</sup> )	1,072	( <sup>10</sup> )
Park.....	34,462	24,831	13,948	14,183	Apache, Arizona.....	32	(2)	1,065	(2)
Sheridan.....	578	(2)	-	(2)	Other counties.....	104	( <sup>10</sup> )	7	( <sup>10</sup> )
Sheridan.....	3,953	627	79,700	38,632	Undistributed by county.....	-	( <sup>10</sup> )	-	( <sup>10</sup> )
Sublette.....	9,080	(2)	33,845	10,324	Pacific, total.....	319,628	<sup>1</sup> 310,430	579,468	425,589
Sweetwater.....	2,529	6,641	17,583	(2)	California, selected counties				
Washakie.....	2,774	2,323	860	(2)	Butte.....	2	(2)	9,101	(2)
Weston.....	147	10,257	9,062	38,005	Colusa.....	-	-	14,379	4,820
Undistributed by county.....	128	245	96	40	Contra Costa.....	491	(2)	4,001	(2)
Colorado, total.....	38,235	48,185	84,938	78,503	Fresno.....	25,478	31,189	17,747	16,390
Adams.....	454	664	618	730	Glenn.....	25	-	17,271	20,722
Baca.....	274	(2)	850	(2)	Humboldt.....	-	(2)	2,097	(2)
La Plata.....	84	(2)	12,481	21,850	Kern.....	95,713	82,544	94,954	71,541
Larimer.....	267	325	-	(2)	Kings.....	1,223	(2)	16,969	11,230
Logan.....	4,311	5,152	24,190	17,401	Los Angeles.....	86,842	67,287	72,826	66,616
Mesa.....	-	(2)	1,669	(2)	Madera.....	-	-	1,697	2,454
Moffat.....	1,452	972	9,885	9,141	Monterey.....	10,163	(2)	2,774	(2)
Montezuma.....	356	(2)	640	(2)	Orange.....	21,714	20,464	19,497	14,631
Montrose.....	100	(2)	667	(2)	Sacramento.....	7	-	54,857	35,055
Morgan.....	3,322	7,109	9,132	10,495	San Benito.....	212	(2)	920	(2)
Rio Blanco.....	18,242	23,465	9,441	11,937	San Joaquin.....	1	-	42,556	4,944
Routt.....	174	152	667	-	San Luis Obispo.....	1,321	1,929	877	1,262
Washington.....	3,797	5,927	1,623	3,633	Santa Barbara.....	17,823	23,333	20,151	14,805
Weld.....	1,363	2,020	1,077	1,927	Solano.....	73	-	48,748	28,356
Other counties.....	3,431	965	11,786	1,120	Sutter.....	-	(2)	15,843	(2)
Undistributed by county.....	608	1,434	212	269	Tulare.....	10	(2)	4,179	3,999
New Mexico, total.....	109,754	95,297	758,698	695,819	Ventura.....	30,317	42,703	49,007	86,443
East New Mexico, total.....	98,343	(NA)	390,921	(NA)	Yolo.....	-	2,558	2,381	6,696
Chaves.....	3,146	2,813	1,288	(2)	Offshore.....	23,515	18,897	45,205	17,020
Eddy.....	14,769	5,667	31,134	14,732	Other counties.....	3,908	13,747	20,466	17,066
Lea.....	76,845	77,596	344,849	390,100	Undistributed by county.....	790	5,779	1,056	1,519
Roosevelt.....	2,605	436	7,114	11,277					
Other counties.....	71	<sup>9</sup> 33	25	<sup>9</sup> 82,433					
Undistributed by county.....	907	<sup>9</sup> 2,160	6,511	<sup>9</sup> 2,706					

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Excludes figures for Alaska.<sup>2</sup>Included with figures for "Other counties."<sup>3</sup>Excludes data for field condensate and drips shipped, amounting to 26 thousand barrels for Missouri, North Dakota, South Dakota, and Nebraska combined; to 8 thousand barrels for Kentucky, Tennessee, and Alabama combined; and to 9 thousand barrels for Montana, Utah, Arizona, and Nevada combined.<sup>4</sup>Figures for South Dakota are included with those for North Dakota.<sup>5</sup>Figures for Maryland, Virginia, and Florida are included with those for West Virginia.<sup>6</sup>Figures for Alabama are included with those for Tennessee.<sup>7</sup>Figures for North Louisiana are included with those for South Louisiana.<sup>8</sup>Figures for all Texas districts are included with those for West Texas A.<sup>9</sup>Figures for West New Mexico are included with those for East New Mexico.<sup>10</sup>Figures for Arizona and Nevada are included with those for Utah.

**TABLE 6E. Drilling Statistics for Oil, Gas, Dry, and Service Wells as Reported by Operators for 1963, 1958, 1954, and 1939, and by Geographic Areas, 1963**

(Represents holes drilled and completed during the year by all operators of oil and gas field properties covered in the census whether they are classified in the Crude Petroleum and Natural Gas Industry or in the Oil and Gas Field Services Industries)

Item	United States, total				Middle Atlantic		
	1963 <sup>1</sup>	1958 <sup>1</sup>	1954 <sup>1</sup>	1939	Total	New York	Pennsylvania
Wells drilled, total <sup>2</sup> .....number..	41,843	46,959	52,327	22,560	815	224	591
Oil wells.....do....	19,837	23,755	28,879	17,263	385	124	261
Gas wells.....do....	4,578	4,526	3,885	1,594	185	17	168
Dry holes.....do....	14,794	16,355	16,422	3,703	103	35	68
Service wells.....do....	2,634	2,323	3,141	(NA)	142	48	94
Footage drilled, total.....1,000 ft..	179,430	193,679	210,801	72,191	1,864	367	1,497
Oil wells.....do....	80,410	92,663	117,897	55,837	577	150	427
Gas wells.....do....	25,241	24,584	18,510	4,439	728	63	665
Dry holes.....do....	69,004	672,837	70,213	11,915	312	93	219
Service wells.....do....	4,775	3,542	4,181	(NA)	247	61	186
Average footage drilled per well, all wells.....	4,288	4,124	4,029	3,200	2,287	1,638	2,533
Oil wells.....do....	4,054	3,901	4,082	3,234	1,499	1,210	1,636
Gas wells.....do....	5,514	5,431	4,764	2,785	3,935	3,706	3,958
Dry holes.....do....	4,664	6,455	4,276	3,218	3,029	2,657	3,221
Service wells.....do....	1,813	1,524	1,331	(NA)	1,739	1,271	1,979
Cost of drilling and equipping wells, total <sup>7</sup> ..\$1,000..	2,099,156	2,428,803	2,306,947	404,904	13,236	2,821	10,415
Per well.....do....	50.2	51.7	44.1	17.9	16.2	12.6	17.6
Per foot.....do....\$1.00..	11.70	12.54	10.94	5.61	7.10	7.69	6.96
Oil wells.....do....\$1,000..	1,048,969	1,310,523	1,449,654	330,547	1,918	440	1,478
Per well.....do....	52.9	55.2	50.2	19.1	4.9	3.5	5.7
Per foot.....do....\$1.00..	13.05	14.14	12.30	5.92	3.32	2.93	3.46
Gas wells.....do....\$1,000..	416,062	440,833	263,619	20,926	7,518	713	6,805
Per well.....do....	90.9	97.4	67.9	13.1	40.6	41.9	40.5
Per foot.....do....\$1.00..	16.48	17.93	14.24	4.71	10.33	11.31	10.23
Dry holes.....do....\$1,000..	599,608	649,342	565,745	53,431	3,117	1,406	1,711
Per well.....do....	40.5	639.7	34.5	34.5	30.3	40.1	25.2
Per foot.....do....\$1.00..	8.69	68.92	8.06	4.48	9.99	15.12	7.81
Service wells.....do....\$1,000..	34,517	24,100	27,929	(NA)	683	262	421
Per well.....do....	13.1	10.4	8.9	(NA)	4.8	5.5	4.5
Per foot.....do....\$1.00..	7.23	6.80	6.68	(NA)	2.77	4.30	2.26
Amount paid or due contractors for drilling and equipping wells, total.....\$1,000..	1,059,015	1,005,069	999,805	147,981	7,321	1,871	5,450
Oil wells.....do....	470,183	472,686	567,183	116,740	997	307	690
Gas wells.....do....	197,005	169,476	105,517	8,560	3,970	537	3,433
Dry holes.....do....	376,695	351,966	314,048	22,681	2,012	873	1,139
Service wells.....do....	15,132	10,941	13,057	(NA)	342	154	188
Payments to drilling contractors, including daywork and turnkey, total.....do....	855,153	(NA)	(NA)	(NA)	6,901	1,669	5,232
Oil wells.....do....	364,520	(NA)	(NA)	(NA)	941	268	673
Gas wells.....do....	152,425	(NA)	(NA)	(NA)	3,780	522	3,258
Dry holes.....do....	326,750	(NA)	(NA)	(NA)	1,843	729	1,114
Service wells.....do....	11,458	(NA)	(NA)	(NA)	337	150	187
Payments to other contractors, total.....do....	203,862	(NA)	(NA)	(NA)	420	202	218
Oil wells.....do....	105,663	(NA)	(NA)	(NA)	56	39	17
Gas wells.....do....	44,580	(NA)	(NA)	(NA)	190	15	175
Dry holes.....do....	49,945	(NA)	(NA)	(NA)	169	144	25
Service wells.....do....	3,674	(NA)	(NA)	(NA)	5	4	1
Cost, excluding amount paid or due contractors, total.....do....	1,040,141	1,419,729	1,307,142	256,923	5,915	950	4,965
Oil wells.....do....	578,786	587,837	882,471	213,807	921	133	788
Gas wells.....do....	219,057	271,357	158,102	12,366	3,548	176	3,372
Dry holes.....do....	222,913	629,376	251,697	30,750	1,105	533	572
Service wells.....do....	19,385	13,159	14,872	(NA)	341	108	233
Cost of casing, tubing, and well equipment, total <sup>8</sup> .....do....	488,859	686,285	604,796	125,205	2,035	306	1,729
Oil wells.....do....	315,973	495,208	495,172	115,579	479	83	396
Gas wells.....do....	106,173	131,384	67,592	6,022	1,129	27	1,102
Dry holes.....do....	55,996	652,045	33,904	3,604	179	132	47
Service wells.....do....	10,717	7,648	8,128	(NA)	248	64	184
All other costs of drilling and equipping, total.....do....	551,282	733,444	702,346	131,718	3,880	644	3,236
Oil wells.....do....	262,813	342,629	387,299	98,228	442	50	392
Gas wells.....do....	112,884	139,973	90,510	6,344	2,419	149	2,270
Dry holes.....do....	166,917	624,531	217,793	27,146	926	401	525
Service wells.....do....	8,668	5,511	6,744	(NA)	93	44	49
Cost of lease equipment beyond the Christmas tree included above, total.....do....	127,329	(NA)	(NA)	(NA)	104	12	92
Oil wells.....do....	104,949	(NA)	(NA)	(NA)	47	10	37
Gas wells.....do....	18,380	(NA)	(NA)	(NA)	55	2	53
Service wells.....do....	4,000	(NA)	(NA)	(NA)	2	-	2
Payments to drilling contractors, including daywork and turnkey, total.....do....	7,493	(NA)	(NA)	(NA)	10	3	7
Oil wells.....do....	7,262	(NA)	(NA)	(NA)	10	3	7
Gas wells.....do....	206	(NA)	(NA)	(NA)	-	-	-
Service wells.....do....	25	(NA)	(NA)	(NA)	-	-	-
Payments to other contractors, total.....do....	24,856	(NA)	(NA)	(NA)	14	-	14
Oil wells.....do....	20,634	(NA)	(NA)	(NA)	-	-	-
Gas wells.....do....	3,831	(NA)	(NA)	(NA)	14	-	14
Service wells.....do....	391	(NA)	(NA)	(NA)	-	-	-
Cost of casing, tubing, and well equipment, except payments to contractors for such equipment, total.....do....	94,980	(NA)	(NA)	(NA)	80	9	71
Oil wells.....do....	77,053	(NA)	(NA)	(NA)	37	7	30
Gas wells.....do....	14,343	(NA)	(NA)	(NA)	41	2	39
Service wells.....do....	3,584	(NA)	(NA)	(NA)	2	-	2

See footnotes at end of table.

TABLE 6E. Drilling Statistics for Oil, Gas, Dry, and Service Wells as Reported by Operators for 1963, 1958, 1954, and 1939, and by Geographic Areas, 1963--Continued

Item	East North Central					West North Central					South Atlantic <sup>10</sup>
	Total	Ohio	Indiana	Illinois	Michigan	Total	North Dakota	Nebraska	Kansas	Iowa, Missouri, and South Dakota <sup>9</sup>	
Wells drilled, total <sup>2</sup> .....number..	4,012	1,045	596	1,764	607	4,710	162	477	4,039	32	1,084
Oil wells.....do....	1,633	484	239	777	133	2,103	78	138	1,883	4	233
Gas wells.....do....	334	211	5	26	92	220	1	2	217	-	677
Dry holes.....do....	1,674	307	297	703	367	1,979	80	325	1,546	28	151
Service wells.....do....	371	43	55	258	15	408	3	12	393	-	23
Footage drilled, total.....1,000 ft..	9,232	2,943	946	3,641	1,702	15,012	1,020	2,208	11,620	164	2,907
Oil wells.....do....	3,676	1,227	414	1,663	372	6,350	537	676	5,112	25	497
Gas wells.....do....	965	738	9	47	171	726	(11)	(11)	713	-	1,885
Dry holes.....do....	4,003	876	460	1,541	1,126	7,368	468	1,487	5,274	139	474
Service wells.....do....	588	102	63	390	33	568	115	115	521	-	51
Average footage drilled per well, all wells.....	2,301	2,816	1,587	2,064	2,804	3,187	6,296	4,629	2,877	5,125	2,682
Oil wells.....do....	2,251	2,535	1,732	2,140	2,797	3,019	6,885	4,899	2,715	6,250	2,133
Gas wells.....do....	2,889	3,498	1,800	1,808	1,859	3,300	(11)	(11)	3,286	(X)	2,784
Dry holes.....do....	2,391	2,853	1,549	2,192	3,068	3,723	5,850	4,575	3,411	4,964	3,139
Service wells.....do....	1,585	2,372	1,145	1,512	2,200	1,392	113,750	113,214	1,326	(X)	2,217
Cost of drilling and equipping wells, total <sup>7</sup> ..\$1,000..	59,355	19,409	4,866	23,345	11,735	100,311	11,588	10,340	76,731	1,652	29,417
Per well.....do....	14.8	18.6	8.2	13.2	19.3	21.3	71.5	21.7	19.0	51.6	27.1
Per foot.....\$1.00..	6.43	6.39	5.34	6.41	6.89	6.68	11.36	4.68	6.60	10.07	10.12
Oil wells.....do....	30,402	9,172	2,844	14,617	3,769	58,434	7,919	5,458	44,632	425	4,037
Per well.....do....	18.6	19.0	11.9	18.8	28.3	27.79	101.5	39.6	23.7	106.3	17.3
Per foot.....\$1.00..	8.27	7.48	6.87	8.79	10.13	9.20	14.75	8.07	8.73	17.00	8.12
Gas wells.....do....	7,198	5,111	66	218	1,803	6,526	(11)	(11)	6,446	-	19,223
Per well.....do....	21.6	24.2	13.2	8.4	19.6	29.7	(11)	(11)	29.7	(X)	28.4
Per foot.....\$1.00..	7.46	6.93	7.33	4.64	10.54	8.99	(11)	(11)	9.04	(X)	10.20
Dry holes.....do....	17,953	4,460	1,665	5,762	6,066	32,093	3,507	4,575	22,784	1,227	5,816
Per well.....do....	10.7	14.3	5.6	8.2	16.5	43.8	14.1	14.7	43.8	-	38.5
Per foot.....\$1.00..	4.48	5.09	3.62	3.74	5.39	4.36	7.49	3.08	4.32	8.83	12.27
Service wells.....do....	3,802	666	291	2,748	97	3,258	11,602	11,307	2,869	-	341
Per well.....do....	10.2	15.5	5.3	10.7	6.5	8.0	11,40.5	11,21.9	7.3	(X)	14.8
Per foot.....\$1.00..	6.47	6.53	4.62	7.05	2.94	5.74	1110.80	116.82	5.51	(X)	6.69
Amount paid or due contractors for drilling and equipping wells, total.....\$1,000..	31,730	10,612	2,602	10,643	7,873	49,643	5,638	5,312	37,439	1,254	16,165
Oil wells.....do....	13,114	4,499	1,124	5,701	1,790	23,800	3,299	1,899	18,397	205	2,151
Gas wells.....do....	3,406	2,376	39	64	927	3,618	(11)	(11)	3,595	-	11,001
Dry holes.....do....	13,729	3,304	1,278	4,035	5,112	20,973	2,270	3,311	14,343	1,049	2,838
Service wells.....do....	1,481	433	161	843	44	1,252	1169	11102	1,104	-	175
Payments to drilling contractors, including daywork and turnkey, total.....do....	28,202	9,309	2,405	9,015	7,473	41,595	4,508	4,842	31,193	1,052	13,014
Oil wells.....do....	11,177	4,084	1,009	4,502	1,582	19,303	2,530	1,588	15,017	168	1,848
Gas wells.....do....	2,885	1,940	39	61	845	2,764	(11)	(11)	2,744	-	8,393
Dry holes.....do....	13,019	2,981	1,211	3,825	5,002	18,607	1,944	3,152	12,627	884	2,618
Service wells.....do....	1,121	304	146	627	44	921	1134	11102	805	-	155
Payments to other contractors, total.....do....	3,528	1,303	197	1,628	400	8,048	1,130	470	6,246	202	3,151
Oil wells.....do....	1,937	415	115	1,199	208	4,497	769	311	3,380	37	303
Gas wells.....do....	521	436	-	3	82	854	(11)	(11)	851	-	2,608
Dry holes.....do....	710	323	67	210	110	2,366	326	159	1,716	165	220
Service wells.....do....	360	129	15	216	-	331	1135	-	299	-	20
Cost, excluding amount paid or due contractors, total.....do....	27,625	8,797	2,264	12,702	3,862	50,668	5,950	5,028	39,292	398	13,252
Oil wells.....do....	17,288	4,673	1,720	8,916	1,979	34,634	4,620	3,559	26,235	220	1,886
Gas wells.....do....	3,792	2,735	27	154	876	2,908	(11)	(11)	2,851	-	8,222
Dry holes.....do....	4,224	1,156	387	1,727	954	11,120	1,237	1,264	8,441	178	2,278
Service wells.....do....	2,321	233	130	1,905	53	2,006	1193	11205	1,765	-	166
Cost of casing, tubing, and well equipment, total <sup>8</sup> .....do....	11,487	3,209	1,161	5,523	1,594	25,152	3,299	2,569	19,148	136	5,939
Oil wells.....do....	8,514	2,000	973	4,446	1,095	20,877	3,056	2,172	15,544	105	1,309
Gas wells.....do....	1,235	832	9	101	293	1,531	(11)	(11)	1,502	-	4,264
Dry holes.....do....	703	179	115	203	206	1,728	170	265	1,262	31	270
Service wells.....do....	1,035	198	64	773	-	1,016	1173	11132	840	-	96
All other costs of drilling and equipping, total.....do....	16,138	5,588	1,103	7,179	2,268	25,516	2,651	2,459	20,144	262	7,313
Oil wells.....do....	8,774	2,673	747	4,470	884	13,757	1,564	1,387	10,691	115	577
Gas wells.....do....	2,557	1,903	18	53	583	1,377	(11)	(11)	1,349	-	3,958
Dry holes.....do....	3,521	977	272	1,524	748	9,392	1,067	999	7,179	147	2,708
Service wells.....do....	1,286	35	66	1,132	53	990	1120	1173	925	-	70
Cost of lease equipment beyond the Christmas tree included above, total.....do....	3,152	419	378	2,056	299	9,569	1,595	923	6,992	59	241
Oil wells.....do....	2,870	311	352	1,967	240	8,545	1,595	824	6,067	59	83
Gas wells.....do....	162	105	2	-	55	800	-	-	925	-	158
Service wells.....do....	120	3	24	89	4	224	-	-	-	-	-
Payments to drilling contractors, including daywork and turnkey, total.....do....	80	31	5	44	-	548	1	1	546	-	15
Oil wells.....do....	73	26	5	42	-	498	1	1	496	-	10
Gas wells.....do....	5	5	-	-	-	43	-	-	43	-	5
Service wells.....do....	2	-	-	2	-	7	-	-	7	-	-
Payments to other contractors, total.....do....	468	46	16	400	6	617	87	57	470	3	6
Oil wells.....do....	443	29	14	394	6	500	87	22	388	3	2
Gas wells.....do....	16	16	-	-	-	84	-	-	-	-	4
Service wells.....do....	9	1	2	6	-	33	-	35	82	-	-
Cost of casing, tubing, and well equipment, except payments to contractors for such equipment, total.....do....	2,604	342	357	1,612	293	8,404	1,507	865	5,976	56	220
Oil wells.....do....	2,354	256	333	1,531	234	7,547	1,507	801	5,183	56	71
Gas wells.....do....	141	84	2	-	55	673	-	-	-	-	149
Service wells.....do....	109	2	22	81	4	184	-	-	793	-	-

See footnotes at end of table.

TABLE 6E. Drilling Statistics for Oil, Gas, Dry, and Service Wells as Reported by Operators for 1963, 1958, 1954, and 1939, and by Geographic Areas, 1963--Continued

Item	East South Central				West South Central					
	Total	Kentucky	Mississippi	Tennessee and Alabama <sup>1,2</sup>	Total	Arkansas	Louisiana			Oklahoma
							Total	North Louisiana	South Louisiana <sup>1</sup>	
Wells drilled, total <sup>2</sup> .....number..	2,376	1,575	694	107	22,833	390	5,007	2,691	2,316	4,314
Oil wells.....do.....	958	632	258	68	11,238	156	2,419	1,332	1,087	2,059
Gas wells.....do.....	181	153	25	3	2,395	39	585	284	301	470
Dry holes.....do.....	1,041	607	400	34	7,900	167	1,969	1,060	909	1,167
Service wells.....do.....	196	183	11	2	1,300	28	34	15	19	618
Footage drilled, total.....1,000 ft..	9,271	2,650	5,792	829	114,806	1,564	33,913	10,472	23,441	17,187
Oil wells.....do.....	3,919	1,054	2,194	671	53,107	593	14,788	4,402	10,386	8,139
Gas wells.....do.....	676	444	1,273	137	16,704	249	4,872	1,172	3,700	2,849
Dry holes.....do.....	4,436	960	3,325	151	42,235	671	14,153	4,865	9,288	5,144
Service wells.....do.....	240	192	(13)	(13)	2,760	51	100	33	67	1,055
Average footage drilled per well, all wells.....	3,902	1,683	8,346	7,748	5,028	4,010	6,773	3,891	10,121	3,984
Oil wells.....do.....	4,091	1,668	8,504	9,868	4,726	3,801	6,113	3,305	9,555	3,953
Gas wells.....do.....	3,735	2,902	137,583	131,400	6,975	6,385	8,328	4,127	12,292	6,062
Dry holes.....do.....	4,261	1,582	8,313	4,441	5,346	4,018	7,188	4,590	10,218	4,408
Service wells.....do.....	1,224	1,049	(13)	(13)	2,123	1,821	2,941	2,200	3,526	1,707
Cost of drilling and equipping wells, total <sup>7</sup> ..\$1,000..	76,176	17,789	48,867	9,520	1,437,673	12,970	607,615	61,349	546,266	174,780
Per well.....do.....	32.1	11.3	70.4	89.0	63.0	33.3	121.4	22.8	235.9	40.5
Per foot.....do.....	8.22	6.71	8.44	11.48	12.52	8.29	17.9	5.86	23.30	10.2
Oil wells.....do.....	42,470	8,547	26,540	7,383	703,049	3,839	277,056	28,330	248,726	88,783
Per well.....do.....	44.3	13.5	102.9	108.6	62.6	24.6	114.5	21.3	228.8	43.1
Per foot.....do.....	10.84	8.11	12.10	11.00	13.24	6.47	18.74	6.44	23.95	10.91
Gas wells.....do.....	7,201	4,280	133,277	133,27	309,506	4,696	136,159	12,543	123,616	37,818
Per well.....do.....	39.8	28.0	1391.0	135.4	129.2	120.4	232.8	44.2	410.7	80.5
Per foot.....do.....	10.65	9.64	1312.00	133.86	18.53	18.86	27.95	10.70	33.41	13.27
Dry holes.....do.....	25,014	3,854	19,050	2,110	404,668	4,071	193,422	20,243	173,179	42,540
Per well.....do.....	24.0	6.3	47.6	62.1	51.2	24.4	98.2	19.1	190.5	36.5
Per foot.....do.....	5.64	4.01	5.73	13.97	9.58	6.07	13.67	4.16	18.65	8.27
Service wells.....do.....	1,491	1,108	(13)	(13)	20,450	364	978	233	745	5,639
Per well.....do.....	7.6	6.1	(13)	(13)	15.7	13.0	28.8	15.5	39.2	9.1
Per foot.....do.....	6.21	5.77	(13)	(13)	7.41	7.14	9.78	7.06	11.1	5.35
Amount paid or due contractors for drilling and equipping wells, total.....\$1,000..	43,270	9,673	29,330	4,267	697,970	7,370	274,015	36,087	237,928	90,200
Oil wells.....do.....	19,570	4,301	12,091	3,178	308,518	1,776	111,778	12,843	98,935	42,368
Gas wells.....do.....	3,230	1,735	131,722	131,722	137,617	2,409	53,138	7,791	45,347	18,383
Dry holes.....do.....	19,665	3,075	15,517	1,073	242,861	3,057	108,638	15,374	93,264	26,973
Service wells.....do.....	805	562	(13)	(13)	8,974	128	461	79	382	2,476
Payments to drilling contractors, including daywork and turnkey, total.....do.....	37,626	8,079	26,223	3,324	556,487	6,097	219,014	31,541	187,473	72,878
Oil wells.....do.....	16,009	3,424	10,187	2,398	235,754	1,719	82,177	10,706	71,471	32,487
Gas wells.....do.....	2,815	1,539	131,492	131,492	105,881	1,512	43,285	6,638	36,647	14,466
Dry holes.....do.....	18,179	2,725	14,544	910	208,149	2,768	93,122	14,139	78,983	24,018
Service wells.....do.....	623	391	(13)	(13)	6,703	98	430	58	372	1,907
Payments to other contractors, total.....do.....	5,644	1,594	3,107	943	141,483	1,273	55,001	4,546	50,455	17,322
Oil wells.....do.....	3,561	877	1,904	780	72,764	57	29,601	2,137	27,464	9,881
Gas wells.....do.....	415	196	13230	-	31,736	897	9,853	1,153	8,700	3,917
Dry holes.....do.....	1,486	350	973	163	34,712	289	15,516	1,235	14,281	2,955
Service wells.....do.....	182	171	(13)	-	2,271	30	31	21	10	569
Cost, excluding amount paid or due contractors, total.....do.....	32,906	8,116	19,533	5,257	739,703	5,600	333,600	25,262	308,338	84,580
Oil wells.....do.....	22,900	4,246	14,449	4,205	394,531	2,063	165,278	15,487	149,791	46,415
Gas wells.....do.....	3,971	2,545	131,551	131,551	171,889	2,287	83,021	4,752	78,269	19,435
Dry holes.....do.....	5,349	779	3,533	1,037	161,807	1,014	84,784	4,869	79,915	15,567
Service wells.....do.....	686	546	(13)	(13)	11,476	236	517	154	363	3,163
Cost of casing, tubing, and well equipment, total <sup>8</sup> .....do.....	14,795	3,480	9,283	2,032	344,996	2,531	148,186	12,333	135,853	38,967
Oil wells.....do.....	11,628	2,039	7,628	1,961	210,481	1,043	86,890	8,056	78,834	25,491
Gas wells.....do.....	1,847	1,159	13746	-	82,649	1,053	37,853	2,913	34,940	8,921
Dry holes.....do.....	1,045	65	909	71	45,368	288	23,136	1,272	21,864	2,948
Service wells.....do.....	275	217	(13)	-	6,498	147	307	92	215	1,607
All other costs of drilling and equipping, total.....do.....	18,111	4,636	10,250	3,225	394,707	3,069	185,414	12,929	172,485	45,613
Oil wells.....do.....	11,272	2,207	6,821	2,244	184,050	1,020	78,388	7,431	70,957	20,924
Gas wells.....do.....	2,124	1,386	1805	15	89,240	1,234	45,168	1,839	43,329	10,514
Dry holes.....do.....	4,304	714	2,624	966	116,439	726	61,648	3,597	58,051	12,619
Service wells.....do.....	411	329	(13)	(13)	4,978	89	210	62	148	1,556
Cost of lease equipment beyond the Christmas tree included above, total.....do.....	3,071	741	2,173	157	82,400	787	24,266	3,329	20,937	17,409
Oil wells.....do.....	2,905	658	2,090	157	64,474	306	17,973	2,961	15,012	14,472
Gas wells.....do.....	80	2	78	-	14,715	476	6,238	346	5,892	2,458
Service wells.....do.....	86	81	5	-	3,211	5	55	22	33	479
Payments to drilling contractors, including daywork and turnkey, total.....do.....	8	8	-	-	6,631	12	425	285	140	5,504
Oil wells.....do.....	8	8	-	-	6,477	10	418	283	135	5,410
Gas wells.....do.....	-	-	-	-	139	-	7	2	5	91
Service wells.....do.....	-	-	-	-	15	2	-	-	-	3
Payments to other contractors, total.....do.....	188	16	172	-	13,512	24	6,752	216	6,536	1,214
Oil wells.....do.....	176	13	163	-	9,956	5	4,642	186	4,456	1,029
Gas wells.....do.....	7	-	7	-	3,254	19	2,102	24	2,078	160
Service wells.....do.....	5	3	2	-	302	-	8	6	2	25
Cost of casing, tubing, and well equipment, except payments to contractors for such equipment, total.....do.....	2,875	717	2,001	157	62,257	751	17,089	2,828	14,261	10,691
Oil wells.....do.....	2,721	637	1,927	157	48,041	291	12,913	2,492	10,421	8,033
Gas wells.....do.....	73	2	71	-	11,322	457	4,129	320	3,809	2,207
Service wells.....do.....	81	78	3	-	2,894	3	47	16	31	451

See footnotes at end of table.

**TABLE 6E. Drilling Statistics for Oil, Gas, Dry, and Service Wells as Reported by Operators for 1963, 1958, 1954, and 1939, and by Geographic Areas, 1963--Continued**

Item	West South Central--Continued											
	Texas											Texas Panhandle
	Total	Texas Gulf Coast A <sup>1</sup>	Texas Gulf Coast B <sup>1</sup>	South Texas <sup>1</sup>	Southwest Texas	North Central Texas A	North Central Texas B	East Texas A	East Texas B	West Texas A	West Texas B	
Wells drilled, total <sup>2</sup> .....number..	13,122	1,176	657	1,196	656	2,703	1,509	345	573	2,748	653	906
Oil wells <sup>3</sup> .....do....	6,604	582	183	470	309	1,473	613	174	269	1,677	342	512
Gas wells <sup>3</sup> .....do....	1,301	153	152	273	38	111	75	39	75	133	53	199
Dry holes <sup>4</sup> .....do....	4,597	417	314	421	295	966	746	117	219	714	227	161
Service wells <sup>4</sup> .....do....	620	24	8	32	14	153	75	15	10	224	31	34
Footage drilled, total.....1,000 ft..	62,142	7,837	4,129	7,142	2,120	7,812	4,774	1,973	2,983	15,509	3,454	4,409
Oil wells.....do....	29,587	3,301	1,079	2,577	811	4,078	2,020	909	1,210	9,389	1,878	2,335
Gas wells.....do....	8,734	1,331	1,034	2,047	176	604	244	288	434	1,024	376	1,176
Dry holes.....do....	22,267	3,150	1,981	2,422	1,088	2,826	2,397	761	1,321	4,371	1,130	820
Service wells.....do....	1,554	55	35	96	45	304	113	15	18	725	70	78
Average footage drilled per well, all wells.....	4,736	6,664	6,285	5,972	3,232	2,890	3,164	5,719	5,206	5,644	5,289	4,866
Oil wells.....do....	4,480	5,672	5,896	5,483	2,625	2,768	3,295	5,224	4,498	5,599	5,491	4,561
Gas wells.....do....	6,713	8,699	6,803	7,498	4,632	5,441	3,253	7,385	5,787	7,699	7,094	5,910
Dry holes.....do....	4,844	7,554	6,309	5,753	3,688	2,925	3,213	6,504	6,032	6,122	4,978	5,093
Service wells.....do....	2,506	2,292	4,375	3,000	3,214	1,987	1,507	1,000	1,800	3,237	2,258	2,294
Cost of drilling and equipping wells, total <sup>7</sup> \$1,000..	642,308	103,105	39,234	80,527	12,146	49,357	29,267	19,894	29,064	191,002	36,341	52,371
Per well.....do....	48.9	87.7	59.7	67.3	18.5	18.3	19.4	57.7	50.7	69.5	55.7	57.8
Per foot.....do....	10.34	13.16	9.50	11.28	5.73	6.32	6.13	10.08	9.74	12.32	10.52	11.88
Oil wells.....do....	333,371	46,125	11,874	26,858	5,420	30,203	16,969	10,366	13,982	123,448	21,259	26,867
Per well.....do....	50.5	79.3	64.9	57.1	17.5	20.5	27.7	59.6	52.0	73.6	62.2	52.5
Per foot.....do....	11.27	13.97	11.00	10.42	6.68	7.41	8.40	11.40	11.56	13.15	11.32	11.51
Gas wells.....do....	130,833	24,810	14,390	29,875	2,084	6,504	1,731	3,706	6,458	19,054	5,643	16,578
Per well.....do....	100.6	162.2	94.7	109.4	54.8	58.6	23.1	95.0	86.1	143.3	106.5	83.3
Per foot.....do....	14.98	18.64	13.92	14.59	11.84	10.77	7.09	12.87	14.88	18.61	15.01	14.10
Dry holes.....do....	164,635	31,649	12,757	22,880	4,454	10,415	10,000	5,774	8,542	40,696	9,051	8,417
Per well.....do....	35.8	75.9	40.6	54.3	15.1	10.8	13.4	49.4	39.0	57.0	39.9	52.3
Per foot.....do....	7.39	10.05	6.44	9.45	4.09	3.69	4.17	7.59	6.47	9.31	8.01	10.26
Service wells.....do....	13,469	521	213	914	188	2,235	567	48	82	7,804	388	509
Per well.....do....	21.7	21.7	26.6	28.6	13.4	14.6	7.6	3.2	8.2	34.8	12.5	15.0
Per foot.....do....	8.67	9.47	6.09	9.52	4.18	7.35	5.02	3.20	4.56	10.76	5.54	6.53
Amount paid or due contractors for drilling and equipping wells, total.....\$1,000..	326,385	44,114	18,046	39,138	7,081	27,036	17,712	10,017	15,828	101,303	20,215	25,895
Oil wells.....do....	152,596	17,193	4,954	10,748	2,889	15,192	8,821	4,591	6,192	59,086	10,922	12,008
Gas wells.....do....	63,687	9,734	5,803	15,742	911	3,319	799	1,947	3,510	10,440	3,046	8,436
Dry holes.....do....	104,193	16,975	7,190	12,445	3,188	7,622	7,853	3,479	6,119	28,044	6,039	5,239
Service wells.....do....	5,909	212	99	203	93	903	239	-	7	3,733	208	212
Payments to drilling contractors, including daywork and turnkey, total.....do....	258,498	34,917	14,565	26,563	6,099	22,687	15,573	8,551	12,985	80,179	16,833	19,546
Oil wells.....do....	119,371	13,298	3,834	7,216	2,386	12,701	7,500	3,815	4,592	46,436	8,882	8,711
Gas wells.....do....	46,618	7,169	4,375	9,684	640	2,615	677	1,633	2,941	7,931	2,580	6,373
Dry holes.....do....	88,241	14,255	6,286	9,533	3,012	6,676	7,179	3,103	5,445	23,244	5,233	4,275
Service wells.....do....	4,268	195	70	130	61	695	217	-	7	2,568	138	187
Payments to other contractors, total.....do....	67,887	9,197	3,481	12,575	982	4,349	2,139	1,466	2,843	21,124	3,382	6,349
Oil wells.....do....	33,225	3,895	1,120	3,532	503	2,491	1,321	776	1,600	12,650	2,040	3,297
Gas wells.....do....	17,069	2,565	1,428	6,058	271	704	122	314	569	2,509	466	2,063
Dry holes.....do....	15,952	2,720	904	2,912	176	946	674	376	674	4,800	806	964
Service wells.....do....	1,641	17	29	73	32	208	22	-	-	1,165	70	25
Cost, excluding amount paid or due contractors, total.....do....	315,923	58,991	21,188	41,389	5,065	22,321	11,555	9,877	13,236	89,699	16,126	26,476
Oil wells.....do....	180,775	28,932	6,920	16,110	2,531	15,011	8,148	5,775	7,790	64,362	10,337	14,859
Gas wells.....do....	67,146	15,076	8,587	14,133	1,173	3,185	932	1,759	2,948	8,614	2,597	8,142
Dry holes.....do....	60,442	14,674	5,567	10,435	1,266	2,793	2,147	2,295	2,423	12,652	3,012	3,178
Service wells.....do....	7,560	309	114	711	95	1,332	328	48	75	4,071	180	297
Cost of casing, tubing, and well equipment, total <sup>8</sup> .....do....	155,312	24,812	8,472	20,370	1,997	9,931	5,347	4,220	6,695	49,485	8,763	15,220
Oil wells.....do....	97,057	13,016	3,267	8,734	1,223	7,069	4,368	2,863	4,139	37,270	5,906	9,202
Gas wells.....do....	34,822	7,673	4,061	7,853	411	1,118	205	875	1,414	4,939	1,333	4,940
Dry holes.....do....	18,996	4,042	1,051	3,327	320	920	652	470	1,120	4,662	1,415	963
Service wells.....do....	4,437	81	39	456	43	824	122	12	22	2,614	109	115
All other costs of drilling and equipping, total.....do....	160,611	34,179	12,716	21,019	3,068	12,390	6,208	5,657	6,541	40,214	7,363	11,256
Oil wells.....do....	83,718	15,916	3,653	7,376	1,308	7,942	3,780	2,912	3,651	27,092	4,431	5,657
Gas wells.....do....	32,324	7,403	4,526	6,280	762	2,067	727	884	1,534	3,675	1,264	3,202
Dry holes.....do....	41,446	10,632	4,462	7,108	946	1,873	1,495	1,825	1,303	7,990	1,597	2,215
Service wells.....do....	3,123	228	75	255	52	508	206	36	53	1,457	71	182
Cost of lease equipment beyond the Christmas tree included above, total.....do....	39,938	3,926	1,392	3,179	446	3,577	2,373	888	2,094	14,222	1,420	6,421
Oil wells.....do....	31,723	3,089	768	1,540	296	2,601	2,139	815	1,868	12,977	1,182	4,448
Gas wells.....do....	5,543	802	596	1,313	93	417	171	71	214	378	140	1,348
Service wells.....do....	2,672	35	28	326	57	559	63	2	12	867	98	625
Payments to drilling contractors, including daywork and turnkey, total.....do....	690	13	3	18	3	83	115	60	113	145	101	36
Oil wells.....do....	639	13	-	9	1	79	107	60	93	143	101	33
Gas wells.....do....	41	-	3	9	2	4	-	-	20	-	-	3
Service wells.....do....	10	-	-	-	-	-	8	-	-	2	-	-
Payments to other contractors, total.....do....	5,522	654	318	565	139	506	277	87	189	1,847	143	797
Oil wells.....do....	4,280	522	103	332	51	410	264	82	175	1,699	126	516
Gas wells.....do....	973	130	213	224	35	11	9	5	14	35	17	280
Service wells.....do....	269	2	2	9	53	85	4	-	-	113	-	1
Cost of casing, tubing, and well equipment, except payments to contractors for such equipment, total.....do....	33,726	3,259	1,071	2,596	304	2,988	1,981	741	1,792	12,230	1,176	5,588
Oil wells.....do....	26,804	2,554	665	1,199	244	2,112	1,768	673	1,600	11,135	955	3,899
Gas wells.....do....	4,529	672	380	1,080	56	402	162	66	180	343	123	1,065
Service wells.....do....	2,393	33	26	317	4	474	51	2	12	752	98	624

See footnotes at end of table.

**TABLE 6E. Drilling Statistics for Oil, Gas, Dry, and Service Wells as Reported by Operators for 1963, 1958, 1954, and 1939, and by Geographic Areas, 1963--Continued**

Item	Mountain								Pacific		
	Total	Montana	Wyoming	Colorado	New Mexico			Idaho, Arizona, Utah, and Nevada <sup>1,4</sup>	Total	California <sup>2</sup>	Washington, Oregon, and Alaska <sup>1,5</sup>
					Total	East New Mexico	West New Mexico				
Wells drilled, total <sup>2</sup> .....number..	3,265	329	903	957	1,233	777	456	233	2,748	2,718	30
Oil wells <sup>3</sup> .....do.....	1,227	128	337	99	602	491	111	61	2,060	2,048	12
Gas wells <sup>3</sup> .....do.....	451	13	62	79	258	39	219	39	135	131	4
Dry holes <sup>4</sup> .....do.....	1,405	174	422	373	316	197	119	120	541	527	14
Service wells.....do.....	182	14	82	16	57	50	7	13	12	12	-
Footage drilled, total.....1,000 ft..	17,064	1,950	4,470	2,839	6,586	4,385	2,201	1,219	9,274	9,025	249
Oil wells.....do.....	6,580	936	1,533	515	3,240	2,868	372	356	5,704	5,597	107
Gas wells.....do.....	2,733	139	375	428	1,712	305	1,407	138	824	803	21
Dry holes.....do.....	7,459	925	2,464	1,856	1,539	1,126	413	675	2,717	2,596	121
Service wells.....do.....	292	(13)	98	40	95	86	9	(13)	29	29	-
Average footage drilled per well, all wells.....	5,226	5,927	4,950	5,007	5,341	5,644	4,827	5,232	3,375	3,320	8,300
Oil wells.....do.....	5,363	7,313	4,549	5,202	5,382	5,841	3,351	5,836	2,769	2,733	8,917
Gas wells.....do.....	6,060	13,296	6,048	5,418	6,636	7,821	6,425	13,615	6,104	6,130	5,250
Dry holes.....do.....	5,309	5,316	5,839	4,976	4,870	5,716	3,471	5,625	5,022	4,926	8,643
Service wells.....do.....	1,604	(13)	1,195	2,500	1,667	1,720	1,286	(13)	2,417	2,417	-
Cost of drilling and equipping wells, total <sup>7</sup> ..\$1,000..	213,692	23,993	54,700	19,675	93,102	65,884	27,218	22,222	169,296	145,222	24,074
Per well.....do.....	65.4	72.9	60.6	34.7	75.5	84.8	59.7	95.4	61.6	53.4	802.5
Per foot.....do.....\$1.00..	12.52	12.30	12.24	6.93	14.14	15.02	12.37	18.23	18.25	16.09	96.68
Oil wells.....do.....\$1,000..	100,140	14,322	23,695	5,277	49,178	44,532	4,646	7,668	108,519	100,268	8,251
Per well.....do.....	81.6	111.9	70.3	53.3	41.7	90.7	41.9	125.7	52.7	49.0	687.6
Per foot.....do.....\$1.00..	15.22	15.30	15.46	10.25	15.18	15.53	12.49	21.54	19.03	17.91	77.11
Gas wells.....do.....\$1,000..	41,734	13,057	8,107	4,565	25,289	6,410	18,879	13,848	17,156	15,270	1,866
Per well.....do.....	92.5	139.1	130.8	57.8	98.0	164.4	86.2	137.0	127.1	116.6	471.5
Per foot.....do.....\$1.00..	15.27	13.88	21.62	10.67	14.77	21.02	13.42	20.47	20.82	19.02	89.81
Dry holes.....do.....\$1,000..	67,776	8,614	21,559	9,523	17,374	13,762	3,612	10,706	43,171	29,234	13,937
Per well.....do.....	48.2	49.5	51.1	25.5	55.0	69.9	30.4	89.2	79.8	55.5	995.5
Per foot.....do.....\$1.00..	9.09	9.31	8.75	5.13	11.29	12.22	8.75	15.86	15.89	11.26	115.18
Service wells.....do.....\$1,000..	4,042	(13)	1,339	310	1,261	1,180	81	(13)	450	450	-
Per well.....do.....	22.2	(13)	16.3	19.4	22.1	23.6	11.6	(13)	37.5	37.5	-
Per foot.....do.....\$1.00..	13.84	(13)	13.66	7.75	13.27	13.72	9.00	(13)	15.52	15.52	-
Amount paid or due contractors for drilling and equipping wells, total.....\$1,000..	119,659	13,639	30,252	12,292	50,631	33,797	16,834	12,845	93,257	78,307	14,950
Oil wells.....do.....	46,708	6,643	7,062	2,028	23,472	21,327	2,145	3,803	55,325	49,141	6,184
Gas wells.....do.....	24,385	1,654	4,012	2,723	15,201	3,347	11,854	12,246	9,778	8,280	1,498
Dry holes.....do.....	46,686	6,342	14,844	7,416	11,288	8,483	2,805	6,796	27,931	20,663	7,268
Service wells.....do.....	1,880	(13)	634	125	670	640	30	(13)	223	223	-
Payments to drilling contractors, including daywork and turnkey, total.....do.....	97,611	11,649	24,916	10,989	39,710	28,414	11,296	10,347	73,717	61,801	11,916
Oil wells.....do.....	36,522	5,338	7,692	1,841	19,251	17,429	1,822	2,400	42,966	38,059	4,907
Gas wells.....do.....	17,768	1,575	3,385	2,319	10,092	2,894	7,198	13,739	8,139	6,687	1,452
Dry holes.....do.....	41,896	5,736	13,382	6,718	9,852	7,591	2,261	6,208	22,439	16,882	5,557
Service wells.....do.....	1,425	(13)	457	111	515	500	15	(13)	173	173	-
Payments to other contractors, total.....do.....	22,048	1,990	5,336	1,303	10,921	5,383	5,538	2,498	19,540	16,506	3,034
Oil wells.....do.....	10,186	1,305	3,070	187	4,221	3,898	323	1,403	12,359	11,082	1,277
Gas wells.....do.....	6,617	1379	627	404	5,109	453	4,656	15,507	1,639	1,593	46
Dry holes.....do.....	4,790	606	1,462	698	1,436	892	544	588	5,492	3,781	1,711
Service wells.....do.....	455	(13)	177	14	155	140	15	(13)	50	50	-
Cost, excluding amount paid or due contractors, total.....do.....	94,033	10,354	24,448	7,383	42,471	32,087	10,384	9,377	76,039	66,915	9,124
Oil wells.....do.....	53,432	7,679	12,933	3,249	25,706	23,205	2,501	3,865	53,194	51,127	2,067
Gas wells.....do.....	17,349	1,203	4,095	1,842	10,088	3,063	7,025	13,602	7,378	6,990	388
Dry holes.....do.....	21,090	2,722	6,715	2,107	6,086	5,279	807	3,910	15,240	8,571	6,669
Service wells.....do.....	2,162	(13)	705	185	591	540	51	(13)	227	227	-
Cost of casing, tubing, and well equipment, total <sup>8</sup> .....do.....	46,050	6,234	10,744	3,450	22,077	15,728	6,349	3,545	38,405	36,346	2,059
Oil wells.....do.....	30,952	5,314	7,942	1,709	13,516	12,209	1,307	2,471	31,733	30,346	1,387
Gas wells.....do.....	9,320	1,277	1,522	1,126	6,212	1,540	4,672	13,696	4,198	3,823	375
Dry holes.....do.....	4,381	643	889	471	2,000	1,660	340	378	2,322	2,025	297
Service wells.....do.....	1,397	(13)	391	144	349	319	30	(13)	152	152	-
All other costs of drilling and equipping, total.....do.....	47,983	4,120	13,704	3,933	20,394	16,359	4,035	5,832	37,634	30,569	7,065
Oil wells.....do.....	22,480	2,365	4,991	1,540	12,190	10,996	1,194	1,394	21,461	20,781	680
Gas wells.....do.....	8,029	1,126	2,573	716	3,876	1,523	2,353	1,906	3,180	3,167	13
Dry holes.....do.....	16,709	1,629	5,826	1,636	4,086	3,619	467	3,532	12,918	6,546	6,372
Service wells.....do.....	765	(13)	314	41	242	221	21	(13)	75	75	-
Cost of lease equipment beyond the Christmas tree included above, total.....do.....	14,002	2,604	4,514	1,023	4,326	3,298	1,028	1,535	14,790	13,613	1,177
Oil wells.....do.....	12,503	2,601	4,133	892	3,450	2,977	473	1,427	13,522	12,710	812
Gas wells.....do.....	1,193	-	190	96	799	254	545	108	1,217	852	365
Service wells.....do.....	306	3	191	35	77	67	10	-	51	51	-
Payments to drilling contractors, including daywork and turnkey, total.....do.....	142	-	13	-	56	55	1	73	59	59	-
Oil wells.....do.....	139	-	13	-	53	53	-	73	47	47	-
Gas wells.....do.....	2	-	-	-	2	1	1	-	12	12	-
Service wells.....do.....	1	-	-	-	1	1	-	-	-	-	-
Payments to other contractors, total.....do.....	1,632	59	490	74	802	567	235	207	8,419	8,419	-
Oil wells.....do.....	1,382	59	473	70	587	537	50	193	8,175	8,175	-
Gas wells.....do.....	237	-	9	2	212	28	184	14	215	215	-
Service wells.....do.....	13	-	8	2	3	2	1	-	29	29	-
Cost of casing, tubing, and well equipment, except payments to contractors for such equipment, total.....do.....	12,228	2,545	4,011	949	3,468	2,676	792	1,255	6,312	5,135	1,177
Oil wells.....do.....	10,982	2,542	3,647	822	2,810	2,387	423	1,161	5,300	4,488	812
Gas wells.....do.....	954	-	181	94	585	225	360	94	990	625	365
Service wells.....do.....	292	3	183	33	73	64	9	-	22	22	-

Footnotes on next page.

# TABLE 6E. Drilling Statistics for Oil, Gas, Dry, and Service Wells as Reported by Operators for 1963, 1958, 1954, and 1939, and by Geographic Areas, 1963--Continued

Footnotes for Table 6E.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Includes the number, footage, and costs for offshore wells for which separate statistics are shown in table 6F. For 1954, excludes data for Alaska.

<sup>2</sup>Represents wells drilled which were completed during the year, wells completed during the year although begun in the previous year, and wells drilled and abandoned before completion during the year.

<sup>3</sup>For wells that produced both oil and gas, respondents were requested to classify the wells according to the more valuable total product. They were requested to classify "distillate" wells as oil wells if the value of all liquids produced was greater than the value of gas produced; but otherwise to classify them as gas wells.

<sup>4</sup>Dry holes represent wells drilled and abandoned without commercial production during the year. Service wells include gas-injection, water-injection, and brine-disposal wells.

<sup>5</sup>Excludes data for 1 oil well in Alaska.

<sup>6</sup>Excludes data for 4 dry holes in Alaska.

<sup>7</sup>Represents the cost of labor, supplies, water, fuel, and power used in such operations as: moving on to location all equipment and supplies incidental to operations; excavating for and building derrick foundation; digging slush pits; erecting and wiring derricks; building loading and pipe racks; laying fuel and water lines; rigging up; drilling hole; making straight-hole tests or surveys; coring; well logging and core analysis; testing formations; mud conditioning; reaming; running casing, screen, and liner; cleaning out, bailing, and swabbing; fishing; repairing and maintaining rig and derrick; tearing down rig; dismantling derrick and racks; and moving equipment off location. It includes tool charges and rentals, but excludes the value of materials salvaged after use and the cost of the drilling derrick if it was left over well for production after completion. Represents only the tangible costs specified; respondents were asked to exclude taxes, interest on investment, overhead costs, etc.

<sup>8</sup>Includes the cost of delivering and installing equipment. Excludes the value of equipment that was salvaged and was used again, but includes the cost of salvaging. Includes tubing, wellhead fittings, gas traps, flow tanks, oil and gas separators, etc., and drilling derricks retained over wells after completion and special-production derricks.

<sup>9</sup>Represents South Dakota, 1 dry hole in Iowa, and 2 dry holes in Missouri.

<sup>10</sup>Represents West Virginia and 1 dry hole in Florida. See also footnote 1.

<sup>11</sup>Figures for gas wells are included with those for service wells.

<sup>12</sup>Represents Alabama and 3 oil wells, 1 gas well, 19 dry holes, and 2 service wells in Tennessee.

<sup>13</sup>Figures for service wells are included with those for gas wells.

<sup>14</sup>Represents Utah; 1 dry hole each in Idaho and Nevada; and 1 oil well, 7 gas wells, and 10 dry holes in Arizona.

<sup>15</sup>Represents Alaska, 2 dry holes in Washington, and 1 dry hole in Oregon. See also footnote 1.



**TABLE 6F. Drilling Statistics for Offshore Operations, by Geographic Areas:  
1963, 1958, and 1954**

(For census purposes, an offshore well is defined as one which is bottomed at, or produces from, a point which lies seaward from the normal or ordinary coast line. The term does not apply to wells drilled to and producing from points underlying inland waters. All data in this table are included in other tables of this report.)

Item	United States, total			South		Pacific	
	1963	1958	1954	1963 <sup>1</sup>	1958	1963 <sup>2</sup>	1958
Establishments operating producing wells or drilling wells for own account.....number..	49	41	25	39	35	10	6
Wells producing during December, total <sup>3</sup> .....do....	2,708	1,705	(NA)	2,232	951	476	754
Oil wells.....do....	2,321	1,599	(NA)	1,858	845	463	754
Gas wells.....do....	387	106	(NA)	374	106	13	-
Crude petroleum, including field condensate and drips shipped and used in lease operations <sup>4</sup> .....1,000 bbls..	174,715	58,487	28,727	143,945	39,583	30,770	18,904
Natural gas produced, total.....million cu. ft..	767,479	230,622	77,759	715,617	(D)	51,862	(D)
From oil wells.....do....	278,717	72,552	21,655	254,503	(D)	24,214	(D)
From gas wells.....do....	488,762	158,070	56,104	461,114	158,070	27,648	-
Employees on March 15.....number..	6,366	1,943	1,383	5,797	1,489	569	454
Wells drilled, total.....do....	703	414	248	657	373	46	41
Oil wells <sup>3</sup> .....do....	349	243	184	316	206	33	37
Gas wells <sup>3</sup> .....do....	94	64	28	90	64	4	-
Dry holes.....do....	260	107	36	251	103	9	4
Footage drilled, total.....1,000 ft..	7,529	3,993	2,217	7,245	3,822	284	171
Oil wells.....do....	3,640	2,146	1,529	3,461	(D)	179	(D)
Gas wells.....do....	1,184	726	309	726	726	-	-
Dry holes.....do....	2,705	1,121	379	3,784	(D)	105	(D)
Average footage drilled per well, all wells.....feet..	10,710	9,645	8,940	11,027	10,247	6,174	4,171
Oil wells.....do....	10,430	8,831	8,310	10,953	(D)	5,424	(D)
Gas wells.....do....	12,595	11,344	11,036	(D)	11,344	(D)	-
Dry holes.....do....	10,404	10,477	10,528	(D)	(D)	(D)	(D)
Cost of drilling and equipping wells, total <sup>5</sup> .....\$1,000..	275,963	183,091	68,385	256,683	178,209	19,280	4,882
Per well.....do....	392.6	442.2	275.7	390.7	477.8	419.1	119.1
Per foot.....do....	36.65	45.85	30.85	35.43	46.63	67.89	28.55
Oil wells.....\$1,000..	132,733	94,633	36,598	120,667	(D)	12,066	(D)
Per well.....do....	380.3	389.4	198.9	381.9	(D)	365.6	(D)
Per foot.....do....	36.47	44.10	23.94	34.86	(D)	67.41	(D)
Gas wells.....\$1,000..	58,532	43,338	16,749	(D)	43,338	(D)	-
Per well.....do....	622.7	677.2	598.2	(D)	677.2	(D)	-
Per foot.....do....	49.44	59.69	54.20	(D)	59.69	(D)	-
Dry holes.....\$1,000..	84,698	45,120	15,038	(D)	(D)	(D)	(D)
Per well.....do....	325.8	421.7	417.7	(D)	(D)	(D)	(D)
Per foot.....do....	31.31	40.25	39.68	(D)	(D)	(D)	(D)
Amount paid or due contractors for drilling & equipping wells, total \$1,000..	143,580	61,122	16,495	130,082	59,570	13,498	1,552
Oil wells.....do....	63,578	29,325	9,066	56,090	(D)	7,488	(D)
Gas wells.....do....	27,018	14,636	3,512	73,992	14,636	6,010	-
Dry holes.....do....	52,984	17,161	3,917	(D)	(D)	(D)	(D)
Payments to drilling contractors, including daywork and turnkey, total.....do....	108,211	(NA)	(NA)	98,070	(NA)	10,141	(NA)
Oil wells.....do....	42,587	(NA)	(NA)	37,268	(NA)	5,299	(NA)
Gas wells.....do....	21,594	(NA)	(NA)	60,802	(NA)	4,842	-
Dry holes.....do....	44,050	(NA)	(NA)	(D)	(D)	(D)	(D)
Payments to other contractors, total.....do....	35,369	(NA)	(NA)	32,012	(NA)	3,357	(NA)
Oil wells.....do....	21,011	(NA)	(NA)	18,822	(NA)	2,189	(NA)
Gas wells.....do....	5,424	(NA)	(NA)	13,190	(NA)	1,168	-
Dry holes.....do....	8,934	(NA)	(NA)	(D)	(D)	(D)	(D)
Cost, excluding amount paid contractors, total.....do....	132,383	121,969	51,890	126,601	118,639	5,782	3,330
Oil wells.....do....	69,155	65,308	27,532	64,577	(D)	4,578	(D)
Gas wells.....do....	31,514	28,702	13,237	62,024	28,702	1,204	-
Dry holes.....do....	31,714	27,959	11,121	(D)	(D)	(D)	(D)
Cost of casing, tubing, and well equipment, total <sup>6</sup> .....do....	59,918	36,139	12,298	56,293	34,814	3,625	1,325
Oil wells.....do....	36,405	24,752	9,249	33,789	(D)	2,616	(D)
Gas wells.....do....	14,239	7,985	1,944	22,504	7,985	1,009	-
Dry holes.....do....	9,274	3,402	1,105	(D)	(D)	(D)	(D)
All other costs of drilling and equipping, total.....do....	72,465	85,830	39,592	70,308	83,825	2,157	2,005
Oil wells.....do....	32,750	40,556	18,283	30,788	(D)	1,962	(D)
Gas wells.....do....	17,275	20,717	11,293	39,520	20,717	195	-
Dry holes.....do....	22,440	24,557	10,016	(D)	(D)	(D)	(D)
Cost of lease equipment beyond the Christmas tree included above, total.....do....	9,521	(NA)	(NA)	7,023	(NA)	2,498	(NA)
Oil wells.....do....	6,380	(NA)	(NA)	(D)	(NA)	(D)	(NA)
Gas wells.....do....	3,141	(NA)	(NA)	(D)	(NA)	(D)	(NA)
Payments to contractors, total.....do....	5,873	(NA)	(NA)	3,933	(NA)	1,940	(NA)
Oil wells.....do....	4,184	(NA)	(NA)	(D)	(NA)	(D)	(NA)
Gas wells.....do....	1,689	(NA)	(NA)	(D)	(NA)	(D)	(NA)
Cost of casing, tubing, and well equipment, except payment to contractors for such equipment, total.....do....	3,648	(NA)	(NA)	3,090	(NA)	558	(NA)
Oil wells.....do....	2,196	(NA)	(NA)	(D)	(NA)	(D)	(NA)
Gas wells.....do....	1,452	(NA)	(NA)	(D)	(NA)	(D)	(NA)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Individual State statistics are as follows: Number of establishments - Florida, 1; Louisiana, 26; Texas, 12. Wells drilled - Florida, 1 dry hole; Louisiana, 320 oil wells, 86 gas wells, 244 dry holes; Texas, 1 oil well, 2 gas wells, 6 dry holes. Total footage drilled - Louisiana, 7,205 thousand feet. Total cost for drilling and equipping wells - Louisiana, \$242,021 thousand (payments to drilling contractors, \$96,104 thousand; payments to other contractors, \$23,855 thousand; cost of casing, tubing, and well equipment, except payments to contractors for such equipment, \$52,408 thousand; and all other costs, \$69,654 thousand).



TABLE 6G. Number of Wells Producing, Shut-In, Drilled, Sold or Leased, Abandoned, and Used for Service, by Geographic Areas: 1963

Geographic area	Producing in December				Shut-in or idle during all of December				Drilled and completed in 1963							
	Oil wells <sup>1</sup>		Gas wells <sup>1</sup>		Oil wells <sup>1</sup>		Gas wells <sup>1</sup>		Total	Oil wells <sup>1</sup>	Gas wells <sup>1</sup>	Dry holes <sup>2</sup>	Service wells <sup>2</sup>	Multiple completions included in preceding columns		
	1963	1962	1963	1962	1963	1962	1963	1962						Total	Oil wells <sup>1</sup>	Gas wells <sup>1</sup>
United States, total....	494,995	486,080	85,633	80,308	45,903	43,146	9,828	9,722	41,843	19,837	4,578	14,794	2,634	2,374	1,988	386
Middle Atlantic, total.....	43,090	44,775	14,720	14,956	2,995	3,200	1,046	994	815	385	185	103	142	11	8	3
New York.....	11,665	12,057	824	838	613	754	30	21	224	124	17	35	48	-	-	-
Pennsylvania.....	31,425	32,718	13,896	14,118	2,382	2,446	1,016	973	591	261	168	68	94	11	8	3
East North Central, total....	41,620	41,077	3,869	3,756	4,184	4,477	269	220	4,012	1,633	334	1,674	371	73	47	26
Ohio.....	8,916	8,687	3,477	3,403	328	460	63	77	1,045	484	211	307	43	32	9	23
Indiana.....	4,697	4,660	81	79	241	220	64	61	596	239	5	297	55	2	2	-
Illinois.....	24,283	24,135	39	26	3,277	3,448	41	34	1,764	777	26	703	258	14	14	-
Michigan.....	3,724	3,595	272	248	338	349	101	48	607	133	92	367	15	25	22	3
West North Central, total....	40,411	40,167	5,655	5,085	2,784	2,739	275	256	4,710	2,103	220	1,979	408	88	77	11
Iowa.....	2	2	-	-	-	-	-	-	1	-	-	1	-	-	-	-
Missouri.....	90	90	-	-	3	3	-	-	2	-	-	2	-	-	-	-
North Dakota.....	1,335	1,298	6	5	155	127	-	-	162	78	1	80	3	3	3	-
South Dakota.....	23	17	-	-	1	1	-	-	29	4	-	25	-	1	1	-
Nebraska.....	1,573	1,504	54	64	347	300	15	13	477	138	2	325	12	5	5	-
Kansas.....	37,388	37,256	5,595	5,016	2,278	2,308	260	243	4,039	1,883	217	1,546	393	79	68	11
South Atlantic, total.....	7,348	7,264	14,766	13,832	562	499	951	917	1,084	233	677	151	23	49	43	6
Maryland.....	-	-	29	24	-	-	4	2	-	-	-	-	-	-	-	-
Virginia.....	-	-	95	60	-	-	59	59	-	-	-	-	-	-	-	-
West Virginia.....	7,332	7,249	14,642	13,748	562	498	888	856	1,083	233	677	150	23	49	43	6
Florida.....	16	15	-	-	-	-	1	-	1	-	-	1	-	-	-	-
East South Central, total....	17,028	17,262	5,043	4,280	1,496	1,523	341	260	2,376	958	181	1,041	196	29	26	3
Kentucky.....	13,823	14,221	4,687	3,907	1,088	1,114	248	192	1,575	632	153	607	183	-	-	-
Tennessee.....	29	27	1	-	2	2	-	-	25	3	1	19	2	-	-	-
Alabama.....	478	399	-	-	19	30	2	-	82	65	2	15	-	13	13	-
Mississippi.....	2,698	2,615	355	373	387	377	91	68	694	258	25	400	11	16	13	3
West South Central, total....	278,866	271,443	32,296	29,671	22,489	20,412	5,652	5,697	22,833	11,238	2,395	7,900	1,300	1,922	1,608	314
Arkansas.....	3,963	3,907	257	230	455	396	127	113	390	156	39	167	28	17	-	17
Louisiana, total.....	24,693	23,188	6,763	5,517	2,959	2,596	1,692	1,622	5,007	2,419	585	1,969	34	522	445	77
North Louisiana.....	12,523	11,672	3,580	2,621	708	552	373	286	2,691	1,332	284	1,060	15	(NA)	(NA)	(NA)
South Louisiana.....	12,170	11,516	3,183	2,896	2,251	2,044	1,319	1,336	2,316	1,087	301	909	19	(NA)	(NA)	(NA)
Oklahoma.....	64,874	64,354	6,303	5,781	6,000	5,363	669	778	4,314	2,059	470	1,167	618	364	321	43
Texas, total.....	185,336	179,994	18,973	18,143	13,075	12,057	3,164	3,184	13,122	6,604	1,301	4,597	620	1,019	842	177
Texas Gulf Coast A.....	12,587	12,470	2,763	2,220	1,667	1,663	550	549	1,176	582	153	417	24	(NA)	(NA)	(NA)
Texas Gulf Coast B.....	5,318	5,177	2,062	1,976	545	516	458	488	657	183	152	314	8	(NA)	(NA)	(NA)
South Texas.....	9,392	9,267	2,809	2,577	2,066	2,138	1,207	1,161	1,196	470	273	421	32	(NA)	(NA)	(NA)
Southwest Texas.....	9,908	9,637	355	327	365	290	84	95	656	309	38	295	14	(NA)	(NA)	(NA)
North Central Texas A.....	29,690	28,438	977	889	1,824	1,669	105	92	2,703	1,473	111	966	153	(NA)	(NA)	(NA)
North Central Texas B.....	13,763	13,008	751	697	927	861	136	136	1,509	613	75	746	75	(NA)	(NA)	(NA)
East Texas A.....	6,361	5,612	405	323	263	209	31	50	345	174	39	117	15	(NA)	(NA)	(NA)
East Texas B.....	22,890	22,934	1,792	1,765	1,154	934	127	115	573	269	75	219	10	(NA)	(NA)	(NA)
West Texas A.....	54,533	53,241	1,466	1,322	2,806	2,477	156	171	2,748	1,677	133	714	224	(NA)	(NA)	(NA)
West Texas B.....	7,798	7,671	414	390	1,188	1,026	113	97	653	342	53	227	31	(NA)	(NA)	(NA)
Texas Panhandle.....	13,096	12,539	5,669	5,657	270	274	198	230	906	512	199	161	34	(NA)	(NA)	(NA)
Mountain, total.....	27,406	26,075	8,270	7,808	3,732	3,452	971	1,076	3,265	1,227	451	1,405	182	126	112	14
Montana.....	3,430	3,497	934	945	532	450	61	60	329	128	13	174	14	1	1	-
Idaho.....	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-
Wyoming.....	6,651	5,937	704	643	1,728	1,776	220	222	903	337	62	422	82	23	20	3
Colorado.....	1,880	1,874	584	533	334	296	200	203	567	99	79	373	16	4	1	3
New Mexico, total.....	14,583	13,931	5,877	5,544	1,051	828	407	509	1,233	602	258	316	57	98	90	8
East New Mexico.....	12,514	11,861	1,023	994	860	711	112	123	777	491	39	197	50	(NA)	(NA)	(NA)
West New Mexico.....	2,069	2,070	4,854	4,550	191	117	295	386	456	111	219	119	7	(NA)	(NA)	(NA)
Arizona.....	5	4	11	8	2	3	7	3	18	1	7	10	-	-	-	-
Utah.....	855	830	160	135	83	97	76	79	213	60	32	108	13	-	-	-
Nevada.....	2	2	-	-	2	2	-	-	1	-	-	-	-	-	-	-
Pacific, total.....	39,226	38,017	1,014	920	7,661	6,844	323	302	2,748	2,060	135	541	12	76	67	9
Washington.....	2	2	-	-	-	-	-	-	2	-	-	2	-	-	-	-
Oregon.....	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-
California.....	39,170	37,970	1,003	913	7,658	6,842	317	296	2,718	2,048	131	527	12	76	67	9
Alaska.....	54	45	11	7	3	2	6	6	27	12	4	11	-	-	-	-

See footnotes at end of table.

TABLE 6G. Number of Wells Producing, Shut-In, Drilled, Sold or Leased, Abandoned, and Used for Service, by Geographic Areas: 1963—Continued

Geographic area	Recompleted in 1963			Purchased, sold, or leased in 1963 <sup>4</sup>				Converted to service wells in 1963		Abandoned in 1963 <sup>5</sup>		Wells being used for service, December 1963
				Purchased or leased from others		Sold or leased to others						
	Total <sup>3</sup>	Oil wells <sup>1</sup>	Gas wells <sup>1</sup>	Oil wells <sup>2</sup>	Gas wells <sup>2</sup>	Oil wells <sup>2</sup>	Gas wells <sup>2</sup>	Oil wells <sup>1</sup>	Gas wells <sup>1</sup>	Oil wells <sup>1</sup>	Gas wells <sup>1</sup>	
United States, total.....	6,154	4,680	966	17,656	4,300	13,494	1,823	3,323	189	9,004	1,435	87,679
Middle Atlantic, total.....	97	42	55	299	114	641	118	23	98	1,910	267	18,921
New York.....	7	7	-	24	-	-	4	5	1	676	17	5,529
Pennsylvania.....	90	35	55	275	114	641	114	18	97	1,234	250	13,392
East North Central, total.....	354	251	16	856	77	973	80	385	7	881	162	11,029
Ohio.....	40	33	7	136	55	244	57	8	7	271	142	1,238
Indiana.....	47	47	-	159	10	225	10	63	-	52	-	929
Illinois.....	247	160	-	356	1	393	2	284	-	479	5	8,621
Michigan.....	20	11	9	205	11	111	11	30	-	79	15	241
West North Central, total.....	512	430	47	1,198	553	1,718	121	337	1	957	62	7,942
Iowa.....	-	-	-	-	-	-	-	-	-	-	-	-
Missouri.....	-	-	-	-	-	-	-	-	-	-	-	1
North Dakota.....	6	6	-	18	-	4	-	20	-	7	-	97
South Dakota.....	-	-	-	2	-	-	-	-	-	-	-	1
Nebraska.....	35	27	6	83	-	34	7	28	-	43	3	303
Kansas.....	471	397	41	1,095	553	1,680	114	289	1	907	59	7,540
South Atlantic, total.....	57	14	43	38	593	26	176	11	8	87	118	1,907
Maryland.....	-	-	-	-	10	-	-	-	-	-	3	-
Virginia.....	-	-	-	-	35	-	-	-	-	-	-	-
West Virginia.....	57	14	43	38	548	26	176	11	8	87	115	1,906
Florida.....	-	-	-	-	-	-	-	-	-	-	-	1
East South Central, total.....	215	160	19	318	764	869	21	216	3	452	77	4,144
Kentucky.....	134	86	12	250	762	779	17	167	3	360	59	3,729
Tennessee.....	2	2	-	-	-	-	-	-	-	1	-	-
Alabama.....	3	3	-	7	-	-	-	1	-	3	-	236
Mississippi.....	76	69	7	61	2	90	4	48	-	88	18	179
West South Central, total.....	3,818	2,809	693	11,875	1,911	7,711	991	1,842	61	4,060	674	38,556
Arkansas.....	47	34	10	266	4	191	-	44	-	72	2	364
Louisiana, total.....	1,236	883	251	324	944	355	85	126	10	394	118	1,426
North Louisiana.....	104	58	39	173	881	258	72	60	6	180	41	825
South Louisiana.....	1,132	825	212	151	63	97	13	66	4	214	77	601
Oklahoma.....	401	291	38	2,987	307	2,160	262	443	19	1,286	83	16,845
Texas, total.....	2,134	1,601	394	8,298	656	5,005	644	1,229	32	2,308	471	19,921
Texas Gulf Coast A.....	497	372	107	259	61	369	56	37	4	314	100	802
Texas Gulf Coast B.....	331	241	88	137	108	88	109	15	4	47	91	310
South Texas.....	309	191	106	137	214	147	93	64	18	343	99	1,335
Southwest Texas.....	57	46	9	223	8	130	16	9	-	47	13	740
North Central Texas A.....	197	156	3	1,421	10	776	9	171	-	540	11	4,836
North Central Texas B.....	74	53	13	1,094	30	514	21	121	2	251	28	1,782
East Texas A.....	39	33	6	719	34	48	-	14	-	28	10	391
East Texas B.....	86	70	16	482	38	214	29	41	1	320	44	591
West Texas A.....	385	333	21	2,586	57	1,871	50	543	3	228	8	6,512
West Texas B.....	72	45	5	599	12	427	5	126	-	99	20	707
Texas Panhandle.....	87	61	20	641	84	421	256	88	-	91	47	1,915
Mountain, total.....	413	328	65	2,412	285	1,209	312	383	10	436	57	3,170
Montana.....	12	12	-	373	5	273	5	40	1	173	22	206
Idaho.....	-	-	-	-	-	-	-	-	-	-	-	-
Wyoming.....	148	133	13	501	8	47	3	52	4	73	4	1,116
Colorado.....	43	34	6	89	10	77	35	29	-	38	6	378
New Mexico, total.....	186	133	45	1,443	256	802	255	227	4	141	24	1,211
East New Mexico.....	118	107	4	1,255	95	685	104	139	2	120	10	897
West New Mexico.....	68	26	41	188	161	117	151	88	2	21	14	314
Arizona.....	-	-	-	3	-	3	-	-	-	1	-	-
Utah.....	24	16	1	3	6	7	14	35	1	10	1	259
Nevada.....	-	-	-	-	-	-	-	-	-	-	-	-
Pacific, total.....	688	646	28	660	3	347	4	126	1	221	18	2,010
Washington.....	-	-	-	-	-	-	-	-	-	-	-	-
Oregon.....	-	-	-	-	-	-	-	-	-	-	-	-
California.....	688	646	28	660	3	347	4	124	1	221	18	2,010
Alaska.....	-	-	-	-	-	-	-	2	-	-	-	-

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>For wells that produced both oil and gas, respondents were requested to classify the wells according to the more valuable total product. They were requested to classify "distillate" wells as oil wells if the value of all liquids produced was greater than the value of gas produced; but otherwise to classify them as gas wells.

<sup>2</sup>Dry holes represent wells drilled and abandoned without commercial production during the year. Service wells include gas-injection, water-injection, and brine-disposal wells.

**TABLE 6H. Drilling Statistics for Oil, Gas, Dry, and Service Wells, by Average Cost Per Foot: 1963**

**Part 1 - 200 Largest Companies and All Other Companies for the United States and West South Central**

Average cost per foot	All companies					200 largest companies					All other companies				
	Estab- lishments	Wells drilled	Footage drilled	Average footage drilled per well	Cost of drilling and equipping wells (\$1,000)	Estab- lishments	Wells drilled	Footage drilled	Average footage drilled per well	Cost of drilling and equipping wells (\$1,000)	Estab- lishments	Wells drilled	Footage drilled	Average footage drilled per well	Cost of drilling and equipping wells (\$1,000)
	(number)	(number)	(1,000 feet)			(number)	(number)	(1,000 feet)			(number)	(number)	(1,000 feet)		
<b>OIL WELLS</b>															
United States, total....	3,936	19,837	80,410	4,054	1,048,969	740	9,093	47,700	5,246	790,600	3,196	10,744	32,710	3,044	258,369
Less than \$3.00.....	383	1,244	2,762	2,220	5,293	12	105	293	2,790	584	371	1,139	2,469	2,168	4,709
\$3.00 to \$3.99.....	256	807	1,985	2,461	6,601	5	25	113	4,520	410	251	782	1,872	2,394	6,191
\$4.00 to \$4.99.....	234	914	2,451	2,682	10,539	11	60	270	4,500	1,221	223	854	2,181	2,554	9,318
\$5.00 to \$5.99.....	327	1,594	4,720	2,961	24,861	21	246	595	2,419	3,326	306	1,348	4,125	3,060	21,535
\$6.00 to \$6.99.....	430	1,663	4,927	2,963	30,803	29	319	1,022	3,204	6,912	401	1,344	3,905	2,882	23,891
\$7.00 to \$7.99.....	371	1,292	4,229	3,273	31,126	33	196	760	3,878	5,634	338	1,096	3,469	3,165	25,492
\$8.00 to \$8.99.....	356	1,508	4,834	3,206	40,706	58	430	1,682	3,912	14,482	298	1,078	3,152	2,924	26,224
\$9.00 to \$9.99.....	260	1,078	3,841	3,563	36,438	64	414	1,653	3,993	15,688	196	664	2,188	3,295	20,750
\$10.00 to \$10.99.....	346	1,462	6,715	4,593	68,806	75	673	3,864	5,741	40,653	271	789	2,851	3,632	28,153
\$11.00 to \$11.99.....	205	950	3,998	4,208	45,846	60	420	2,220	5,286	25,408	145	530	1,778	3,355	20,438
\$12.00 to \$12.99.....	158	1,440	5,963	4,141	72,523	55	1,119	4,793	4,283	59,555	103	321	1,170	3,726	12,968
\$13.00 to \$13.99.....	112	840	4,676	5,567	62,808	43	654	3,916	5,988	52,614	69	186	760	4,086	10,194
\$14.00 to \$14.99.....	103	955	4,170	4,366	59,347	52	747	3,164	4,236	44,909	51	208	1,006	4,907	14,438
\$15.00 to \$15.99.....	64	489	2,935	6,002	44,701	30	409	2,557	6,252	38,933	34	80	378	4,725	5,768
\$16.00 to \$16.99.....	48	389	2,457	6,316	40,697	23	317	2,119	6,685	35,221	25	72	338	4,694	5,476
\$17.00 to \$17.99.....	46	397	2,489	6,270	42,737	27	359	2,254	6,279	38,642	19	38	235	6,184	4,095
\$18.00 to \$18.99.....	22	211	1,091	5,171	20,057	11	186	978	5,258	17,953	11	25	113	4,520	2,104
\$19.00 to \$19.99.....	28	1,101	4,706	4,274	91,074	17	1,039	4,538	4,368	89,293	11	62	168	2,710	1,781
\$20.00 to \$20.99.....	20	96	526	5,479	10,786	8	80	413	5,162	8,475	12	16	113	7,063	2,311
\$21.00 to \$21.99.....	28	455	3,730	8,198	79,356	15	430	3,621	8,421	77,032	13	25	109	4,360	2,324
\$22.00 to \$22.99.....	20	74	487	6,581	10,950	10	56	415	7,411	9,301	10	18	72	4,000	1,649
\$23.00 to \$23.99.....	18	64	282	4,406	6,569	21	127	831	6,543	20,157	11	25	62	2,480	1,472
\$24.00 to \$24.99.....	14	88	611	6,943	15,060										
\$25.00 to \$25.99.....	17	67	328	4,896	8,486										
\$26.00 to \$26.99.....	6	39	379	9,718	9,945										
\$27.00 to \$27.99.....	7	127	1,260	9,921	35,146										
\$28.00 to \$28.99.....	4	19	136	7,158	3,869	25	496	4,227	8,522	120,601	14	26	134	5,154	3,597
\$29.00 to \$29.99.....	5	270	2,258	8,363	66,752										
\$30.00 to \$31.99.....	11	54	259	4,796	7,889	17	77	492	6,390	21,269	9	14	37	2,786	1,262
\$32.00 to \$37.99.....	15	37	270	7,297	14,642										
\$38.00 to \$44.99.....	5	77	686	8,909	26,517	5	77	686	8,909	26,517	-	-	-	-	-
\$45.00 and over.....	17	36	249	6,917	18,039	13	32	224	7,000	15,810	4	4	25	6,250	2,229
West South Central, total.	2,169	11,238	53,107	4,726	703,049	435	5,324	33,747	6,339	551,788	1,734	5,914	19,360	3,274	151,261
Less than \$3.00.....	188	699	1,915	2,740	4,408	8	39	190	4,872	515	312	1,104	2,849	2,581	7,568
\$3.00 to \$3.99.....	132	444	1,124	2,531	3,675										
\$4.00 to \$4.99.....	126	501	1,465	2,924	6,239										
\$5.00 to \$5.99.....	219	1,123	3,376	3,006	17,986										
\$6.00 to \$6.99.....	267	1,127	3,561	3,160	23,393										
\$7.00 to \$7.99.....	179	695	2,513	3,616	18,669	23	159	603	3,792	4,900	156	536	1,910	3,563	14,179
\$8.00 to \$8.99.....	194	741	2,549	3,440	21,498	36	176	889	5,051	7,603	158	565	1,660	2,938	13,895
\$9.00 to \$9.99.....	142	577	2,440	4,229	23,225	41	225	1,194	5,307	11,328	101	352	1,246	3,540	11,897
\$10.00 to \$10.99.....	209	813	4,117	5,064	43,281	46	452	2,770	6,128	29,214	163	361	1,347	3,731	14,067
\$11.00 to \$11.99.....	117	600	2,977	4,962	34,082	39	358	1,913	5,344	21,888	78	242	1,064	4,397	12,194
\$12.00 to \$12.99.....	93	791	4,673	5,908	58,493	34	609	3,936	6,463	48,807	59	182	737	4,049	9,686
\$13.00 to \$13.99.....	63	666	3,969	5,959	53,292	29	586	3,502	5,976	47,019	34	80	467	5,838	6,273
\$14.00 to \$14.99.....	54	384	2,283	5,945	32,356	31	310	1,870	6,032	26,384	23	74	413	5,581	5,972
\$15.00 to \$15.99.....	26	349	2,201	6,307	33,444	14	320	2,052	6,413	31,153	12	29	149	5,138	2,291
\$16.00 to \$16.99.....	20	181	1,007	5,564	16,799	10	155	892	5,755	14,920	10	26	115	4,423	1,879
\$17.00 to \$17.99.....	23	173	1,203	6,954	20,409	13	157	1,101	7,013	18,618	10	16	102	6,375	1,791
\$18.00 to \$18.99.....	9	152	808	5,316	14,802	14	331	2,334	7,051	44,281	7	22	99	4,500	1,879
\$19.00 to \$19.99.....	12	201	1,625	8,085	31,358										
\$20.00 to \$20.99.....	8	25	198	7,920	4,029	10	409	3,565	8,716	75,697	9	17	124	7,294	2,587
\$21.00 to \$21.99.....	11	401	3,491	8,706	74,255										
\$22.00 to \$22.99.....	8	29	268	9,241	6,051	11	57	439	7,702	10,021	4	8	54	6,750	1,266
\$23.00 to \$23.99.....	7	36	225	6,250	5,236										
\$24.00 to \$24.99.....	10	55	446	8,190	11,008	6	50	420	8,400	10,377	4	5	26	5,200	631
\$25.00 to \$25.99.....	12	54	450	8,333	11,878	7	45	411	9,133	10,881	5	9	39	4,333	997
\$27.00 to \$29.99.....	11	303	3,138	10,356	90,618	6	294	3,073	10,417	88,778	5	9	65	7,222	1,840
\$30.00 to \$31.99.....	6	28	222	7,929	6,751	17	109	1,042	9,648	40,384	12	9	43	4,778	2,181
\$32.00 to \$34.99.....	4	9	85	9,444	2,780										
\$35.00 to \$44.99.....	10	64	683	10,672	26,111										
\$45.00 and over.....	9	17	95	5,588	6,923										

See footnotes at end of table.



**TABLE 6H. Drilling Statistics for Oil, Gas, Dry, and Service Wells, by Average Cost Per Foot: 1963--Continued**

**Part 1 - 200 Largest Companies for the United States and West South Central**

Average cost per foot	All companies					200 largest companies					All other companies				
	Estab- lishments (number)	Wells drilled (number)	Footage drilled (1,000 feet)	Average footage drilled per well	Cost of drilling and equipping wells (\$1,000)	Estab- lishments (number)	Wells drilled (number)	Footage drilled (1,000 feet)	Average footage drilled per well	Cost of drilling and equipping wells (\$1,000)	Estab- lishments (number)	Wells drilled (number)	Footage drilled (1,000 feet)	Average footage drilled per well	Cost of drilling and equipping wells (\$1,000)
DRY HOLES															
United States, total....	4,521	14,794	69,004	4,664	599,608	888	4,111	28,469	6,925	400,288	3,633	10,683	40,535	3,794	199,320
Less than \$2.00.....	398	1,375	4,836	3,517	5,875	11	69	280	4,058	439	387	1,306	4,556	3,489	5,436
\$2.00 to \$2.99.....	490	1,940	6,632	3,419	16,631	29	120	514	4,283	1,268	461	1,820	6,118	3,362	15,363
\$3.00 to \$3.99.....	660	2,053	6,960	3,390	22,691	56	221	996	4,507	3,499	604	1,832	5,964	3,255	20,192
\$4.00 to \$4.99.....	807	2,520	9,154	3,633	40,393	73	230	1,030	4,478	4,618	734	2,290	8,124	3,548	35,775
\$5.00 to \$5.99.....	658	1,596	7,225	4,527	39,575	79	318	1,877	5,903	10,056	579	1,278	5,348	4,185	29,519
\$6.00 to \$6.99.....	302	1,003	4,493	4,480	29,045	82	296	1,576	5,324	10,315	220	707	2,917	4,126	18,730
\$7.00 to \$7.99.....	342	808	4,541	5,620	33,253	57	217	1,335	6,152	9,948	285	591	3,206	5,425	23,305
\$8.00 to \$8.99.....	158	474	2,650	5,591	22,498	65	244	1,665	6,824	14,170	93	230	985	4,283	8,328
\$9.00 to \$9.99.....	122	513	3,046	5,938	28,534	65	314	2,160	6,879	20,652	57	199	886	4,452	7,882
\$10.00 to \$10.99.....	111	310	1,936	6,245	20,224	59	190	1,336	7,032	13,937	52	120	600	5,000	6,287
\$11.00 to \$11.99.....	102	319	2,039	6,392	23,408	43	218	1,603	7,353	18,402	59	101	436	4,317	5,006
\$12.00 to \$12.99.....	54	358	2,128	5,944	26,467	35	302	1,688	5,589	21,088	19	56	440	7,857	5,379
\$13.00 to \$13.99.....	47	268	2,190	8,172	29,110	30	243	2,043	8,407	27,121	17	25	147	5,880	1,989
\$14.00 to \$14.99.....	35	114	902	7,912	13,073	24	94	741	7,883	10,755	11	20	161	8,050	2,318
\$15.00 to \$15.99.....	30	122	940	7,705	14,226	20	96	800	8,333	12,472	10	26	140	5,385	1,754
\$16.00 to \$16.99.....	30	119	796	6,689	13,143	20	101	703	6,960	11,609	10	18	93	5,167	1,534
\$17.00 to \$17.99.....	14	53	469	8,849	8,206	38	158	1,301	8,234	24,109	8	17	148	8,706	2,707
\$18.00 to \$18.99.....	19	73	567	7,767	10,574										
\$19.00 to \$19.99.....	13	49	413	8,429	8,036	15	88	1,012	11,500	21,333	10	13	84	6,462	1,779
\$20.00 to \$20.99.....	15	37	313	8,459	6,399										
\$21.00 to \$21.99.....	10	64	783	12,234	16,753	19	232	2,185	9,418	50,519	5	7	44	6,286	1,007
\$22.00 to \$22.99.....	10	35	317	9,057	7,059										
\$23.00 to \$23.99.....	14	204	1,912	9,373	44,467	8	153	1,659	10,843	40,644	-	-	-	-	-
\$24.00 to \$24.99.....	8	153	1,659	10,843	40,644										
\$25.00 to \$25.99.....	4	28	323	11,536	8,285	4	28	323	11,536	8,285	-	-	-	-	-
\$26.00 to \$26.99.....	7	24	223	9,292	5,908										
\$27.00 to \$27.99.....	5	32	243	7,594	6,668	14	67	619	9,239	17,164	3	12	85	7,083	2,350
\$28.00 to \$29.99.....	5	23	238	10,348	6,938										
\$30.00 to \$31.99.....	9	32	156	4,875	4,811	9	32	156	4,875	4,811	-	-	-	(X)	-
\$32.00 to \$34.99.....	6	20	226	11,300	7,338										
\$35.00 to \$39.99.....	11	23	134	5,826	5,003	11	32	324	10,125	11,051	6	11	36	3,273	1,290
\$40.00 to \$44.99.....	7	21	247	11,762	10,594										
\$45.00 and over.....	18	31	313	10,097	22,819	22	48	543	11,313	32,023	3	4	17	4,250	1,390
West South Central, total.	2,449	7,900	42,235	5,346	404,668	495	2,439	19,276	7,903	294,370	1,954	5,461	22,959	4,204	110,298
Less than \$2.00.....	262	897	3,196	3,563	3,783	7	52	187	3,596	317	255	845	3,009	3,561	3,466
\$2.00 to \$2.99.....	263	1,007	3,434	3,410	8,683	13	38	134	3,526	340	250	969	3,300	3,406	8,343
\$3.00 to \$3.99.....	295	832	3,324	3,995	11,437	35	115	618	5,374	2,183	260	717	2,706	3,774	9,254
\$4.00 to \$4.99.....	456	1,472	6,136	4,168	25,921	46	130	587	4,515	2,639	410	1,342	5,549	4,135	23,282
\$5.00 to \$5.99.....	345	644	2,875	4,464	15,499	36	106	571	5,387	3,113	309	538	2,304	4,283	12,386
\$6.00 to \$6.99.....	142	417	2,189	5,249	14,036	41	126	763	6,056	4,984	101	291	1,426	9,900	9,052
\$7.00 to \$7.99.....	258	508	3,079	6,061	22,366	34	110	703	6,391	5,229	224	398	2,376	5,970	17,137
\$8.00 to \$8.99.....	87	288	1,858	6,451	15,821	39	164	1,279	7,799	10,883	48	124	579	4,670	4,938
\$9.00 to \$9.99.....	51	218	1,506	6,908	14,338	35	165	1,196	7,248	11,449	16	53	310	5,850	2,889
\$10.00 to \$10.99.....	51	156	1,183	7,583	12,391	33	105	856	8,152	8,935	18	51	327	6,412	3,456
\$11.00 to \$11.99.....	36	187	1,387	7,417	15,911	23	152	1,163	7,651	13,369	13	35	224	6,400	2,542
\$12.00 to \$12.99.....	32	160	1,330	8,313	16,513	20	117	956	8,171	11,949	12	43	374	8,698	4,564
\$13.00 to \$13.99.....	25	215	1,842	8,567	24,442	18	204	1,751	8,583	23,212	7	11	91	8,273	1,230
\$14.00 to \$14.99.....	14	54	460	8,519	6,717	9	49	412	8,408	6,030	5	5	48	9,600	687
\$15.00 to \$15.99.....	13	84	744	8,857	11,619	22	150	1,249	8,327	20,032	6	6	51	8,500	821
\$16.00 to \$16.99.....	15	72	556	7,722	9,234										
\$17.00 to \$17.99.....	10	46	398	8,652	6,967	23	106	918	8,660	17,107	7	14	145	10,357	2,650
\$18.00 to \$18.99.....	12	40	334	8,350	6,333										
\$19.00 to \$19.99.....	8	34	331	9,735	6,457	40	480	5,203	10,840	123,376	9	14	113	8,071	2,578
\$20.00 to \$20.99.....	8	20	201	10,050	4,088										
\$21.00 to \$22.99.....	14	89	1,036	11,640	22,395	9	29	279	9,621	8,909	-	-	-	(X)	-
\$23.00 to \$24.99.....	13	316	3,320	10,506	79,105										
\$25.00 to \$25.99.....	4	28	323	11,536	8,285	12	41	451	11,000	20,314	4	5	27	5,400	1,023
\$26.00 to \$29.99.....	10	41	436	10,634	12,081										
\$30.00 to \$34.99.....	9	29	279	9,621	8,909	9	29	279	9,621	8,909	-	-	-	(X)	-
\$35.00 to \$44.99.....	10	30	320	10,667	13,166										
\$45.00 and over.....	6	16	158	9,875	8,171	12	41	451	11,000	20,314	4	5	27	5,400	1,023

See footnotes at end of table.

**TABLE 6H Drilling Statistics for Oil, Gas, Dry, and Service Wells, by Average Cost Per Foot: 1963--Continued**

**Part 1 - 200 Largest Companies and All Other Companies for the United States and West South Central**

Geographic area and average cost per foot	All companies					200 largest companies					All other companies				
	Estab- lishments	Wells drilled	Footage drilled	Average footage drilled per well	Cost of drilling and equipping wells (\$1,000)	Estab- lishments	Wells drilled	Footage drilled	Average footage drilled per well	Cost of drilling and equipping wells (\$1,000)	Estab- lishments	Wells drilled	Footage drilled	Average footage drilled per well	Cost of drilling and equipping wells (\$1,000)
	(number)	(number)	(1,000 feet)			(number)	(number)	(1,000 feet)			(number)	(number)	(1,000 feet)		
SERVICE WELLS															
United States, total....	730	2,634	4,775	1,813	34,517	216	1,254	2,761	2,202	25,914	514	1,380	2,014	1,459	8,603
Less than \$2.00.....	111	325	473	1,455	675	9	64	124	1,938	211	102	261	349	1,337	464
\$2.00 to \$2.99.....	152	363	522	1,438	1,233	13	37	66	1,784	156	139	326	456	1,399	1,077
\$3.00 to \$3.99.....	74	292	408	1,397	1,382	10	106	163	1,538	586	64	186	245	1,317	796
\$4.00 to \$4.99.....	67	208	437	2,100	1,822	21	71	186	2,620	821	46	137	251	1,832	1,001
\$5.00 to \$5.99.....	42	189	312	1,651	1,710	13	63	152	2,413	860	29	126	160	1,270	850
\$6.00 to \$6.99.....	54	168	371	2,208	2,346	17	54	149	2,759	965	37	114	222	1,947	1,381
\$7.00 to \$7.99.....	67	365	713	1,953	5,297	24	285	579	2,031	4,328	43	80	134	1,675	969
\$8.00 to \$8.99.....	34	228	418	1,833	3,520	18	185	352	1,903	2,978	16	43	66	1,535	542
\$9.00 to \$9.99.....	23	65	184	2,831	1,730	15	44	160	3,636	1,512	8	21	24	1,143	218
\$10.00 to \$10.99.....	14	63	115	1,825	1,163	9	33	85	2,576	862	5	30	30	1,000	301
\$11.00 to \$11.99.....	17	77	180	2,338	2,026	8	52	137	2,635	1,537	9	25	43	1,720	489
\$12.00 to \$12.99.....	12	54	134	2,481	1,671	6	47	118	2,511	1,473	6	7	16	2,286	198
\$13.00 to \$13.99.....	12	32	75	2,344	1,012	9	29	70	2,414	945	3	3	5	1,667	67
\$14.00 to \$14.99.....	10	27	70	2,593	1,014	12	42	216	5,143	3,279	4	16	9	563	127
\$15.00 to \$15.99.....	6	31	155	5,000	2,392										
\$16.00 to \$19.99.....	12	29	98	3,379	1,795										
\$20.00 to \$24.99.....	8	28	54	1,929	1,165	8	28	54	1,929	1,165	-	-	-	-	-
\$25.00 and over.....	15	90	56	622	2,564	12	85	52	612	2,441	3	5	4	800	123
West South Central, total.	393	1,300	2,760	2,123	20,450	120	592	1,660	2,804	16,050	273	708	1,100	1,554	4,400
Less than \$2.00.....	57	143	210	1,458	299	3	5	4	800	6	54	138	206	1,493	293
\$2.00 to \$2.99.....	105	236	367	1,555	849	7	15	33	2,200	74	98	221	334	1,511	775
\$3.00 to \$3.99.....	38	130	190	1,462	640	6	51	104	2,039	362	32	79	86	1,089	278
\$4.00 to \$4.99.....	34	125	255	2,040	1,101	13	54	135	2,500	591	21	71	120	1,690	510
\$5.00 to \$5.99.....	21	80	165	2,063	922	7	41	94	2,293	549	14	39	71	1,821	373
\$6.00 to \$6.99.....	27	118	251	2,127	1,567	11	38	96	2,526	618	16	80	155	1,938	949
\$7.00 to \$7.99.....	25	106	267	2,519	1,963	13	78	212	2,718	1,571	12	28	55	1,964	392
\$8.00 to \$8.99.....	14	93	231	2,484	1,948	10	83	222	2,675	1,871	4	10	9	900	77
\$9.00 to \$9.99.....	16	49	160	3,265	1,505	17	60	199	3,317	1,917	7	13	20	1,538	187
\$10.00 to \$10.99.....	8	24	59	2,458	599										
\$11.00 to \$11.99.....	9	60	139	2,317	1,550										
\$12.00 to \$12.99.....	9	43	102	2,372	1,275	8	79	205	2,595	2,407	10	24	36	1,500	418
\$13.00 to \$13.99.....	7	25	55	2,200	742										
\$14.00 to \$14.99.....	7	11	54	4,909	787										
\$15.00 to \$19.99.....	7	34	206	6,059	3,433	25	88	356	4,045	6,084	5	5	8	1,600	148
\$20.00 and over.....	9	23	49	2,130	1,270										

See footnotes at end of table.

TABLE 6H. Drilling Statistics for Oil, Gas, Dry, and Service Wells, by Average  
Cost Per Foot: 1963--Continued

Part II - Number of Wells Drilled, by Geographic Areas

Average cost per foot	United States, total	Middle Atlantic			East North Central					West North Central					South Atlantic						
		Total	New York	Pennsylvania	Total	Ohio	Indiana	Illinois	Michigan	Total	North Dakota	Nebraska	Kansas	Iowa, Missouri, and South Dakota							
OIL WELLS																					
Total.....	19,837	385	124	261	1,633	484	239	777	133	2,103	78	138	1,883	4	233						
Less than \$3.00....	1,244	156	44	112	149	63	21	63	2	98	-	4	94	-	11						
\$3.00 to \$3.99.....	807	119	64	55	66	15	5	35	11	101	}	22	45	}	81	-	3				
\$4.00 to \$4.99.....	914	35	10	25	139	50	44	36	9	152					150	-	13				
\$5.00 to \$5.99.....	1,594	14	3	11	177	102	31	41	3	183					153	-	12				
\$6.00 to \$6.99.....	1,663	11	1	10	151	60	18	70	3	198					190	-	1				
\$7.00 to \$7.99.....	1,292	10	2	8	159	32	21	96	10	290	}	30	}	}	283	-	17				
\$8.00 to \$8.99.....	1,508	19	-	19	149	41	36	63	9	344					314	-	77				
\$9.00 to \$9.99.....	1,078	2	-	2	242	33	16	165	28	172					140	-	9				
\$10.00 to \$10.99..	1,462	4	-	4	119	17	2	92	8	243					17	218	-	60			
\$11.00 to \$11.99..	950	-	-	-	83	20	1	59	3	105	13	2	90	-	5						
\$12.00 to \$12.99..	1,440	4	-	4	60	23	7	10	20	57	1	9	47	-	10						
\$13.00 to \$13.99..	840	1	-	1	33	2	4	15	12	35	5	2	27	1	7						
\$14.00 to \$14.99..	955	2	-	2	53	21	22	3	7	23	-	-	23	-	1						
\$15.00 to \$15.99..	489	-	-	-	9	-	1	4	4	25	12	-	13	-	1						
\$16.00 to \$16.99..	389	4	-	4	4	-	-	4	-	9	-	-	9	-	2						
\$17.00 to \$17.99..	397	-	-	-	2	-	1	1	-	9	1	-	6	2	-						
\$18.00 to \$18.99..	211	-	-	-	-	-	-	-	-	14	-	-	14	-	1						
\$19.00 to \$19.99..	1,101	-	-	-	4	1	-	3	-	3	-	-	3	-	-						
\$20.00 to \$20.99..	96	-	-	-	-	-	-	-	-	1	-	-	1	-	2						
\$21.00 to \$21.99..	455	2	-	2	1	-	-	1	-	-	-	-	-	-	1						
\$22.00 to \$22.99..	74	-	-	-	4	1	-	-	3	6	-	-	6	-	-						
\$23.00 to \$23.99..	64	-	-	-	7	2	4	-	1	16	-	-	16	-	-						
\$24.00 to \$24.99..	88	2	-	2	-	-	-	-	-	-	-	-	-	-	-						
\$25.00 to \$25.99..	67	-	-	-	4	-	2	2	-	9	9	-	-	-	-						
\$26.00 to \$26.99..	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
\$27.00 to \$27.99..	127	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
\$28.00 to \$28.99..	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
\$29.00 to \$29.99..	270	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
\$30.00 to \$31.99..	54	-	-	-	}	18	1	3	14	-	10	4	-	5	1	-					
\$32.00 to \$34.99..	28	-	-	-																	
\$35.00 to \$37.99..	9	-	-	-																	
\$38.00 to \$44.99..	77	-	-	-																	
\$45.00 and over...	36	-	-	-																	
GAS WELLS																					
Total.....	4,578	185	17	168	334	211	5	26	92	220	1	2	217	-	677						
Less than \$3.00....	190	11	-	11	39	32	-	6	1	9	-	-	9	-	12						
\$3.00 to \$3.99.....	110	6	-	6	28	25	}	1	19	}	}	}	}	}	7	-	8				
\$4.00 to \$4.99.....	148	5	-	5	9	6									5	20	-	-	20	-	14
\$5.00 to \$5.99.....	256	10	1	9	26	13									29	1	-	28	-	26	
\$6.00 to \$6.99.....	247	18	-	18	34	28									10	-	2	8	-	8	
\$7.00 to \$7.99.....	297	9	-	9	43	15	3	-	25	14	-	-	14	-	33						
\$8.00 to \$8.99.....	328	42	-	42	82	66	}	-	}	}	}	}	}	}	39	-	41				
\$9.00 to \$9.99.....	307	7	1	6	19	7									27	29	-	-	29	-	59
\$10.00 to \$10.99..	546	5	-	5	13	12	-	1	-	19	-	-	19	-	254						
\$11.00 to \$11.99..	397	40	10	30	8	}	-	-	}	15	-	-	15	-	106						
\$12.00 to \$12.99..	240	1	1	-	17		4	-		-	21	2	-	-	2	-	8				
\$13.00 to \$13.99..	225	8	4	4	-		-	-		-	-	14	-	-	14	-	3				
\$14.00 to \$14.99..	139	3	-	3	8		-	-		-	-	6	-	-	6	-	13				
\$15.00 to \$15.99..	110	-	-	-	2	}	-	-	}	-	-	-	-	-	17						
\$16.00 to \$16.99..	98	2	-	2	-		3	-		-	8	-	-	-	-	-	3				
\$17.00 to \$17.99..	139	13	-	13	1		-	-		-	-	1	-	-	1	-	62				
\$18.00 to \$18.99..	53	-	-	-	-		-	-		-	-	-	-	-	-	-	8				
\$19.00 to \$19.99..	145	-	-	-	}	5	-	-	5	6	-	-	6	-	2						
\$20.00 to \$20.99..	87	-	-	-																	
\$21.00 to \$21.99..	46	1	-	1																	
\$22.00 to \$22.99..	33	4	-	4																	
\$23.00 to \$24.99..	48	-	-	-																	
\$25.00 to \$25.99..	20	-	-	-																	
\$26.00 to \$26.99..	47	-	-	-																	
\$27.00 to \$28.99..	16	-	-	-																	
\$29.00 to \$29.99..	43	-	-	-																	
\$30.00 to \$30.99..	27	-	-	-	}	-	-	-	-	-	-	-	-	-	-	-					
\$31.00 to \$31.99..	21	-	-	-																	
\$32.00 to \$33.99..	34	-	-	-																	
\$34.00 to \$34.99..	18	-	-	-																	
\$35.00 to \$37.99..	28	-	-	-																	
\$38.00 to \$39.99..	52	-	-	-																	
\$40.00 to \$44.99..	16	-	-	-																	
\$45.00 and over...	67	-	-	-																	

See footnotes at end of table.

TABLE 6H. Drilling Statistics for Oil, Gas, Dry, and Service Wells, by Average Cost Per Foot: 1963--Continued

Part II - Number of Wells Drilled, by Geographic Areas

Average cost per foot	East South Central				West South Central											
	Total	Kentucky	Mis- sissippi	Tennessee and Alabama	Total	Arkansas	Louisiana			Oklahoma	Texas					
							Total	North Louisiana	South Louisiana		Total	Texas Gulf Coast A	Texas Gulf Coast B	South Texas	South- west Texas	North Central Texas A
OIL WELLS																
Total.....	958	632	258	68	11,238	156	2,419	1,332	1,087	2,059	6,604	584	183	469	309	1,472
Less than \$3.00....	61	58	3	-	699	18	139	135	4	161	381	19	1	15	11	205
\$3.00 to \$3.99.....	40	28	6	6	444	12	45	42	3	88	299	14	3	19	36	143
\$4.00 to \$4.99.....	33	32	1	-	501	30	70	65	5	97	304	19	2	33	12	100
\$5.00 to \$5.99.....	49	41	3	5	1,123	5	511	507	4	166	441	30	19	12	78	155
\$6.00 to \$6.99.....	118	110	7	1	1,127	54	216	213	3	122	735	19	10	17	40	386
\$7.00 to \$7.99.....	71	48	23	-	695	5	86	77	9	149	455	19	12	8	42	144
\$8.00 to \$8.99.....	147	121	16	10	741	2	145	138	7	189	405	57	20	18	12	47
\$9.00 to \$9.99.....	44	31	13	-	577	4	75	70	5	112	386	20	54	15	18	49
\$10.00 to \$10.99...	152	54	74	24	813	21	55	51	4	170	567	10	5	235	8	95
\$11.00 to \$11.99...	40	35	2	3	600	5	19	2	17	243	333	21	28	6	46	35
\$12.00 to \$12.99...	39	24	15	-	791	-	2	1	1	264	525	157	15	2	1	31
\$13.00 to \$13.99...	21	10	11	-	666	-	8	2	6	97	561	12	4	21	4	10
\$14.00 to \$14.99...	21	3	18	-	384	1	29	17	12	39	316	27	-	3	-	51
\$15.00 to \$15.99...	23	3	14	6	349	-	9	-	9	66	274	3	1	-	1	7
\$16.00 to \$16.99...	37	2	22	13	181	-	5	2	3	5	171	9	2	41	-	7
\$17.00 to \$17.99...	23	-	23	-	173	-	41	-	41	57	75	1	2	2	-	-
\$18.00 to \$18.99...	-	-	-	-	152	-	-	-	-	5	147	135	1	5	-	1
\$19.00 to \$19.99...	26	24	2	-	201	-	127	-	127	-	74	3	4	1	-	-
\$20.00 to \$20.99...	-	-	-	-	25	-	7	-	7	2	16	-	-	4	-	-
\$21.00 to \$21.99...	5	4	1	-	401	-	387	2	385	5	9	-	-	-	-	-
\$22.00 to \$22.99...	-	-	-	-	29	-	9	-	9	13	7	2	-	1	-	1
\$23.00 to \$23.99...	-	-	-	-	36	-	10	5	5	-	26	2	-	-	-	-
\$24.00 to \$24.99...	-	-	-	-	55	-	20	2	18	3	32	1	-	-	-	1
\$25.00 to \$25.99...	-	-	-	-	25	-	1	1	-	2	22	3	-	-	-	-
\$26.00 to \$26.99...	1	1	-	-	29	-	27	-	27	-	2	1	-	-	-	-
\$27.00 to \$27.99...	-	-	-	-	120	-	114	-	114	-	6	-	-	-	-	-
\$28.00 to \$28.99...	-	-	-	-	7	-	-	-	-	-	7	-	-	1	-	-
\$29.00 to \$29.99...	4	-	4	-	176	-	174	-	174	-	2	-	-	-	-	-
\$30.00 to \$31.99...	3	3	-	-	28	-	20	-	20	-	8	-	-	3	-	1
\$32.00 to \$34.99...	-	-	-	-	9	-	7	-	7	2	-	-	-	-	-	-
\$35.00 to \$37.99...	-	-	-	-	64	-	60	-	60	2	2	-	-	2	-	-
\$38.00 to \$44.99...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$45.00 and over....	-	-	-	-	17	-	1	-	1	-	16	-	-	5	-	3
GAS WELLS																
Total.....	181	153	25	3	2,395	39	585	284	301	470	1,301	153	152	273	38	111
Less than \$3.00....	12	5	5	2	105	-	8	18	3	23	74	2	4	38	3	1
\$3.00 to \$3.99.....	2	2	-	-	54	-	13	-	-	4	37	2	4	14	2	-
\$4.00 to \$4.99.....	4	4	-	-	94	-	18	-	-	29	47	9	11	2	1	1
\$5.00 to \$5.99.....	4	1	2	1	160	-	57	122	10	42	61	14	7	16	1	6
\$6.00 to \$6.99.....	2	1	1	-	158	-	57	-	-	33	68	7	19	10	-	13
\$7.00 to \$7.99.....	29	29	-	-	143	-	21	21	-	7	115	12	17	22	16	8
\$8.00 to \$8.99.....	2	1	1	-	112	-	2	1	1	19	91	3	8	-	-	-
\$9.00 to \$9.99.....	83	-	-	-	94	-	4	1	3	27	63	4	9	9	8	14
\$10.00 to \$10.99...	6	86	3	-	213	-	73	72	1	31	109	4	11	15	-	61
\$11.00 to \$11.99...	11	9	2	-	132	-	10	4	6	56	66	5	3	-	-	-
\$12.00 to \$12.99...	-	-	-	-	107	-	4	2	2	28	75	11	11	13	-	1
\$13.00 to \$13.99...	15	-	-	-	126	-	2	-	2	44	80	1	-	-	-	2
\$14.00 to \$14.99...	4	15	4	-	71	-	17	14	3	30	23	6	13	9	-	-
\$15.00 to \$15.99...	-	-	-	-	68	3	10	7	3	31	24	1	12	-	-	1
\$16.00 to \$16.99...	-	-	-	-	69	7	4	-	4	12	46	7	4	3	2	-
\$17.00 to \$17.99...	-	-	-	-	48	1	4	3	1	4	39	3	-	12	-	-
\$18.00 to \$18.99...	-	-	-	-	42	5	2	-	2	16	19	4	-	13	-	-
\$19.00 to \$19.99...	-	-	-	-	134	17	5	1	4	12	100	1	-	68	-	-
\$20.00 to \$20.99...	-	-	-	-	74	3	29	14	15	2	40	20	10	2	-	-
\$21.00 to \$21.99...	-	-	-	-	16	-	8	-	8	-	8	-	1	-	-	-
\$22.00 to \$22.99...	-	-	-	-	23	-	3	-	3	1	19	-	-	13	1	-
\$23.00 to \$24.99...	-	-	-	-	19	2	5	2	3	-	12	5	-	1	-	-
\$25.00 to \$25.99...	-	-	-	-	61	-	32	1	31	9	20	9	2	4	-	-
\$26.00 to \$26.99...	7	-	7	-	49	-	37	-	37	3	9	-	-	6	-	-
\$27.00 to \$28.99...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$29.00 to \$29.99...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$30.00 to \$30.99...	-	-	-	-	31	-	29	-	29	1	1	-	1	-	-	-
\$31.00 to \$31.99...	-	-	-	-	22	-	21	1	20	-	1	-	-	-	-	-
\$32.00 to \$33.99...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$34.00 to \$34.99...	-	-	-	-	43	-	22	-	22	-	21	-	-	-	-	-
\$35.00 to \$37.99...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$38.00 to \$39.99...	-	-	-	-	52	-	42	-	42	-	10	23	5	3	4	-
\$40.00 to \$44.99...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$45.00 and over....	-	-	-	-	75	-	46	-	46	6	23	-	-	-	-	-

See footnotes at end of table.



TABLE 6H. Drilling Statistics for Oil, Gas, Dry, and Service Wells, by Average

Cost Per Foot: 1963--Continued

## Part II - Number of Wells Drilled, by Geographic Areas

Average cost per foot	West South Central--Continued						Mountain								Pacific		
	Texas--Continued						Total	Montana	Wyoming	Colorado	New Mexico			Idaho, Arizona, Utah, and Nevada	Total	California	Washington, Oregon, and Alaska
	North Central Texas B	East Texas A	East Texas B	West Texas A	West Texas B	Texas Pan-handle					Total	East New Mexico	West New Mexico				
OIL WELLS																	
Total.....	613	174	268	1,677	343	512	1,227	128	337	99	602	491	111	61	2,060	2,048	12
Less than \$3.00....	65	6	20	18	9	12	56	-	15	13	28	14	14	-	14	14	-
\$3.00 to \$3.99.....	26	7	25	15	2	9	33	10	15	1	7	6	1	-	1	1	-
\$4.00 to \$4.99.....	21	21	14	52	26	4	25	-	1	7	17	17	-	-	16	16	-
\$5.00 to \$5.99.....	59	15	13	28	20	12	36	11	1	5	19	19	-	-	-	-	-
\$6.00 to \$6.99.....	185	9	13	42	8	6	56	4	14	11	27	27	-	-	1	1	-
\$7.00 to \$7.99.....	88	27	16	70	12	17	40	-	7	14	19	19	-	-	10	10	-
\$8.00 to \$8.99.....	58	3	32	80	30	48	22	1	8	8	5	5	-	-	9	9	-
\$9.00 to \$9.99.....	24	8	26	52	31	89	24	-	6	14	4	3	1	-	8	8	-
\$10.00 to \$10.99...	20	15	20	61	17	81	64	10	9	3	42	34	8	-	7	7	-
\$11.00 to \$11.99...	19	3	27	102	24	22	52	2	7	3	40	35	5	-	65	65	-
\$12.00 to \$12.99...	14	26	29	118	79	53	90	6	44	2	38	14	24	-	389	389	-
\$13.00 to \$13.99...	2	-	-	457	7	44	56	5	21	-	30	18	12	-	21	-	-
\$14.00 to \$14.99...	3	17	1	101	65	48	70	1	22	3	44	44	-	-	401	-	-
\$15.00 to \$15.99...	3	-	-	257	-	2	68	2	23	2	41	30	11	-	14	-	-
\$16.00 to \$16.99...	-	2	-	109	1	-	127	63	-	-	62	55	7	2	25	-	-
\$17.00 to \$17.99...	1	-	12	55	2	-	106	4	4	-	89	89	-	9	84	-	-
\$18.00 to \$18.99...	1	-	-	4	-	-	17	3	1	-	12	12	-	1	27	-	-
\$19.00 to \$19.99...	-	-	-	7	1	58	45	-	17	-	4	1	3	24	822	1,447	1
\$20.00 to \$20.99...	-	-	-	4	8	-	67	-	58	-	7	3	4	2	1	-	-
\$21.00 to \$21.99...	-	1	-	8	-	-	22	-	10	1	6	6	-	5	23	-	-
\$22.00 to \$22.99...	-	-	-	3	-	-	5	-	-	1	2	2	-	2	30	-	-
\$23.00 to \$23.99...	19	-	5	-	-	-	5	-	-	1	3	1	2	1	-	-	-
\$24.00 to \$24.99...	-	14	-	16	-	-	29	-	13	-	7	7	-	9	2	2	-
\$25.00 to \$25.99...	-	-	2	14	-	3	23	-	21	-	2	2	-	-	6	6	-
\$26.00 to \$26.99...	-	-	-	1	-	-	8	-	-	-	8	8	-	-	1	1	-
\$27.00 to \$27.99...	-	-	4	-	-	2	7	4	-	-	-	-	-	3	-	-	-
\$28.00 to \$28.99...	-	-	4	1	1	-	12	-	2	10	-	-	-	-	-	-	-
\$29.00 to \$29.99...	-	-	-	-	-	2	18	-	-	-	18	18	-	-	72	72	-
\$30.00 to \$31.99...	4	-	-	-	-	-	18	-	-	-	18	-	18	-	-	-	-
\$32.00 to \$34.99...	-	-	-	-	-	-	19	2	13	-	3	2	1	1	-	-	-
\$35.00 to \$37.99...	-	-	-	-	-	-	2	-	2	-	-	-	-	-	-	-	-
\$38.00 to \$44.99...	-	-	-	-	-	-	3	-	3	-	-	-	-	-	-	-	-
\$45.00 and over....	1	-	5	2	-	-	2	-	-	-	-	-	-	2	11	-	11
GAS WELLS																	
Total.....	75	39	75	133	53	199	451	13	62	79	258	39	219	39	135	131	4
Less than \$3.00....	12	2	3	1	5	3	2	-	-	2	-	-	-	-	-	-	-
\$3.00 to \$3.99.....	11	2	-	-	2	-	5	-	-	3	-	-	-	2	-	-	-
\$4.00 to \$4.99.....	3	11	6	1	2	-	2	-	-	1	1	1	-	-	-	-	-
\$5.00 to \$5.99.....	11	-	2	-	2	2	1	-	-	1	-	-	-	-	-	-	-
\$6.00 to \$6.99.....	7	3	4	5	10	23	15	2	-	9	4	2	2	-	2	2	-
\$7.00 to \$7.99.....	7	-	-	-	-	23	23	-	3	16	4	4	-	-	3	3	-
\$8.00 to \$8.99.....	-	-	15	31	-	11	5	2	-	3	-	-	-	-	5	5	-
\$9.00 to \$9.99.....	12	2	8	1	-	19	16	-	-	-	16	4	12	-	-	-	-
\$10.00 to \$10.99...	-	-	2	5	-	15	16	5	5	-	6	-	6	-	20	20	-
\$11.00 to \$11.99...	5	2	11	7	1	2	83	2	1	12	62	7	55	6	2	2	-
\$12.00 to \$12.99...	1	4	-	9	6	19	74	-	-	19	44	1	43	8	19	19	-
\$13.00 to \$13.99...	3	6	9	13	8	59	69	-	17	-	45	1	44	10	2	2	-
\$14.00 to \$14.99...	-	-	-	-	-	-	29	1	-	1	27	-	27	-	5	5	-
\$15.00 to \$15.99...	-	-	-	-	-	-	16	1	-	-	15	3	12	-	7	7	-
\$16.00 to \$16.99...	2	-	1	18	11	8	9	-	-	-	-	-	-	-	-	-	-
\$17.00 to \$17.99...	-	2	-	21	1	-	14	-	-	-	-	-	-	-	-	-	-
\$18.00 to \$18.99...	-	-	-	-	-	2	3	-	13	12	6	4	2	5	25	24	1
\$19.00 to \$19.99...	-	1	1	-	-	29	5	-	-	-	-	-	-	-	-	-	-
\$20.00 to \$20.99...	-	-	3	1	2	2	5	-	-	-	-	-	-	-	-	-	-
\$21.00 to \$21.99...	-	-	-	6	1	-	-	-	-	-	-	-	-	-	20	20	-
\$22.00 to \$22.99...	-	-	-	5	-	-	6	-	-	-	-	-	-	-	-	-	-
\$23.00 to \$24.99...	-	-	5	1	-	-	23	-	-	-	-	-	-	-	-	-	-
\$25.00 to \$25.99...	-	3	-	-	-	2	1	-	16	-	17	2	15	2	-	-	-
\$26.00 to \$26.99...	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-
\$27.00 to \$28.99...	-	1	-	-	-	-	8	-	5	-	3	3	-	-	2	2	-
\$29.00 to \$29.99...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$30.00 to \$30.99...	-	-	-	-	-	-	3	-	-	-	3	2	1	-	-	-	-
\$31.00 to \$31.99...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	14	-
\$32.00 to \$33.99...	-	-	1	-	-	-	8	-	1	-	2	2	-	5	3	3	-
\$34.00 to \$34.99...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$35.00 to \$37.99...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$38.00 to \$39.99...	1	-	4	8	2	3	5	-	1	-	3	3	-	1	6	3	3
\$40.00 to \$44.99...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$45.00 and over....	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

TABLE 6H. Drilling Statistics for Oil, Gas, Dry, and Service Wells, by Average Cost Per Foot: 1963--Continued

Part II - Number of Wells Drilled, by Geographic Areas

Average cost per foot	United States, total	Middle Atlantic			East North Central					West North Central					South Atlantic								
		Total	New York	Pennsylvania	Total	Ohio	Indiana	Illinois	Michigan	Total	North Dakota	Nebraska	Kansas	Iowa, Missouri, and South Dakota									
DRY HOLES																							
Total.....	14,794	103	35	68	1,674	307	297	703	367	1,979	80	325	1,546	28	151								
Less than \$2.00....	1,375	11	-	11	120	32	16	46	26	158	7	45	104	2	6								
\$2.00 to \$2.99....	1,940	3	2	1	231	28	64	115	24	454	1	172	280	1	-								
\$3.00 to \$3.99....	2,053	2	-	2	434	36	133	213	52	488	2	38	448	-	10								
\$4.00 to \$4.99....	2,520	8	1	7	265	52	34	156	23	342	15	45	282	-	12								
\$5.00 to \$5.99....	1,596	9	7	20	333	84	26	104	119	192	26	19	173	-	11								
\$6.00 to \$6.99....	1,003	18			161	37	14	33	77	154			117	64	11	3							
\$7.00 to \$7.99....	808	14	14	-	62	19	9	22	29	72	10	1	32	-	8								
\$8.00 to \$8.99....	473	1	-	1	17					22			29	32	25	4	23						
\$9.00 to \$9.99....	513	9	-	9	23	15	-	6	12	51	15	-	37	4	16								
\$10.00 to \$10.99...	307	13	-	13	10					5			-	1	9	2	1	5	6				
\$11.00 to \$11.99...	319	3	-	3	4	3	-	-	1	9	2	1	1	5	44								
\$12.00 to \$12.99...	361	-	-	-	3	1	1	-	4	3	-	2	-	1	4								
\$13.00 to \$13.99...	268	1	-	1	3					-	-	-	-	-	-	-	-	-	-				
\$14.00 to \$14.99...	86	-	-	-	-	-	-	-	-	2	1	1	-	-	-								
\$15.00 to \$15.99...	153	11	11	-	8	-	-	8	-	17	1	1	15	-	8								
\$16.00 to \$16.99...	119																						
\$17.00 to \$17.99...	53																						
\$18.00 to \$18.99...	73																						
\$19.00 to \$19.99...	49																						
\$20.00 to \$20.99...	37																						
\$21.00 to \$21.99...	132																						
\$22.00 to \$22.99...	35																						
\$23.00 to \$23.99...	136																						
\$24.00 to \$24.99...	153																						
\$25.00 to \$25.99...	28																						
\$26.00 to \$26.99...	22																						
\$27.00 to \$27.99...	32																						
\$28.00 to \$29.99...	23																						
\$30.00 to \$31.99...	32	12	7	5	2	-	-	2	-	25	2	10	32	-	23								
\$32.00 to \$34.99...	20																						
\$35.00 to \$39.99...	23																						
\$40.00 to \$44.99...	21																						
\$45.00 and over....	31																						
SERVICE WELLS																							
Total.....	2,634	142	48	94	371	43	55	258	15	408	3	12	393	-	23								
Less than \$2.00....	325	67	11	56	32	3	13	16	-	53	1	1	51	-	-								
\$2.00 to \$2.99....	363	22	16	6	37	6	12	22	2	59	-	1	58	-	-								
\$3.00 to \$3.99....	292	25	14	27	20			2	13	46	-	-	-	46	-	-							
\$4.00 to \$4.99....	208	16			7	6	11	4	-	34	-	-	-	34	-	-							
\$5.00 to \$5.99....	189	12	7	5	12			6	-	79	-	-	-	79	-	-							
\$6.00 to \$6.99....	168				10	28	4	2	-	12	-	-	12	-	-								
\$7.00 to \$7.99....	365				189			157	-	51	-	-	48	-	-								
\$8.00 to \$8.99....	228				39	-	1	38	-	18	-	-	14	-	-								
\$9.00 to \$9.99....	65	12	7	5	-	-	-	-	-	3	2	10	9	-	23								
\$10.00 to \$10.99...	63				2			-	2	-						25							
\$11.00 to \$11.99...	77				23			14	9	-						4							
\$12.00 to \$12.99...	54									-						-	-						
\$13.00 to \$13.99...	32				-			-	-	-						-	3	-	-	-	-	-	-
\$14.00 to \$14.99...	27				-			-	-	-						-	2	-	-	-	-	-	-
\$15.00 to \$15.99...	31				-			-	-	-						-	-	-	-	-	-	-	-
\$16.00 to \$19.99...	29				-			-	-	-						-	-	9	-	-	-	-	-
\$20.00 to \$24.99...	28	-	-	-	-	-	-	-	-	2	-	-	2	-	-								
\$25.00 and over....	90	-	-	-	-	-	-	-	-	8	-	-	8	-	-								

See footnotes at end of table.

TABLE 6H. Drilling Statistics for Oil, Gas, Dry, and Service Wells, by Average Cost Per Foot: 1963--Continued

Part II - Number of Wells Drilled, by Geographic Areas

Average cost per foot	East South Central				West South Central													
	Total	Kentucky	Mississippi	Tennessee and Alabama	Total	Arkansas	Louisiana			Oklahoma	Texas							
							Total	North Louisiana	South Louisiana		Total	Texas Gulf Coast A	Texas Gulf Coast B	South Texas	South-west Texas	North Central Texas A		
DRY HOLES																		
Total.....	1,041	607	400	34	7,900	167	1,969	1,060	909	1,167	4,597	417	314	421	295	966		
Less than \$2.00....	112	75	37	-	897	30	149	147	2	133	585	25	25	38	40	304		
\$2.00 to \$2.99.....	75	42	29	4	1,007	23	229	208	21	125	630	29	36	95	41	183		
\$3.00 to \$3.99.....	148	87	61	-	832	22	211	161	50	103	496	28	39	56	29	123		
\$4.00 to \$4.99.....	319	310	8	1	1,472	3	430	401	29	135	904	29	45	44	133	235		
\$5.00 to \$5.99.....	190	30	159	1	644	33	48	36	12	203	360	48	41	29	8	50		
\$6.00 to \$6.99.....	75	27	48	-	417	32	40	12	28	84	261	18	36	20	26	17		
\$7.00 to \$7.99.....	37	12	21	4	508	1	68	26	42	50	389	16	10	16	4	14		
\$8.00 to \$8.99.....	27	23	2	2	287	6	27	14	13	66	188	33	37	13	5	29		
\$9.00 to \$9.99.....	5	1	2	2	218	-	59	30	29	59	100							
\$10.00 to \$10.99...	22	-	10	12	153	5	{	10	2	8	{	93	31	25	{	-	1	7
\$11.00 to \$11.99...	12	-	-	-	187			26	-	26		-		26		153	58	-
\$12.00 to \$12.99...	-	-	20	6	163	4	54	12	149	{	29	76	30	4	13	-	2	
\$13.00 to \$13.99...	-	-			215	-	107				63	45	6	11	5	3	-	-
\$14.00 to \$14.99...	14	-	-	-	26	2	{	12	3	11	{	21	29	3	70	-	-	-
\$15.00 to \$15.99...	-	-	-	-	115			2	2	1		1				-	98	7
\$16.00 to \$16.99...	{	-	-	-	72	4	2	1	-	-	66	5	19	1	3	-	-	-
\$17.00 to \$17.99...		-	-	-	46	-	18	-	18	39	24					-	-	-
\$18.00 to \$18.99...		-	-	-	40	-	20	-	20	-	14	-	-	-	-	-	-	
\$19.00 to \$19.99...		-	-	-	34	-	-	-	-	-	-	13	6	-	-	5	-	
\$20.00 to \$20.99...		-	-	-	20	-	6	-	6	1	6	-	-	-	-	-	-	
\$21.00 to \$21.99...		-	-	-	130	-	123	-	123	1	6	-	-	-	4	-	-	
\$22.00 to \$22.99...	-	-	-	27	-	22	5	17	-	5	-	-	-	-	-	-		
\$23.00 to \$23.99...	-	-	-	116	{	1	218	-	218	-	29	1	{	-	-	-	-	
\$24.00 to \$24.99...	-	-	-	132		-	-	-	-	-	-	-		-	-	-	-	-
\$25.00 to \$25.99...	5	-	3	2	28	-	30	-	30	-	19	-	-	15	{	-	-	-
\$26.00 to \$26.99...		-	-	-	21	-	-	-	-	-	-	-	-	-		-	-	-
\$27.00 to \$27.99...		-	-	-	18	-	14	-	14	4	-	-	-	-		-	-	-
\$28.00 to \$29.99...		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
\$30.00 to \$31.99...	-	-	-	-	11	1	10	1	9	11	7	1	-	-	-	-	-	
\$32.00 to \$34.99...	-	-	-	-	18		-	-	-	-	-	-	-	-	-	-	-	
\$35.00 to \$39.99...	-	-	-	-	13		-	7	1	6	2	4	1	-	-	-	-	
\$40.00 to \$44.99...	-	-	-	-	17		-	17	-	17	-	-	-	-	-	-	-	
\$45.00 and over....	-	-	-	-	16	-	10	-	10	-	6	2	1	-	-	-	-	
SERVICE WELLS																		
Total.....	196	183	11	2	1,300	28	34	15	19	618	620	24	8	32	14	153		
Less than \$2.00....	22	18	2	2	143	7	1	1	-	97	38	1	-	-	1	22		
\$2.00 to \$2.99.....	3	1	2	-	236	5	8	6	2	105	118	8	4	2	-	42		
\$3.00 to \$3.99.....	68	67	1	-	130	1	1	1	-	72	56	-	-	-	-	-		
\$4.00 to \$4.99.....	5	-	-	-	125	2	-	-	-	61	62	7	{	3	12	40		
\$5.00 to \$5.99.....	8	16	4	-	80	2	1	-	1	40	37						-	-
\$6.00 to \$6.99.....	7	-	-	-	118	6	{	1	-	68	47	1	2	-	-	16		
\$7.00 to \$7.99.....	-	-	-	-	106			2	1	-	1	72	29	1	-	-	-	-
\$8.00 to \$8.99.....	75	75	-	-	93	-	1	-	1	55	37	2	-	10	-	9		
\$9.00 to \$9.99.....	2	2	-	-	49	1	7	1	6	2	39	-	1	-	-	-		
\$10.00 to \$10.99...	1	-	-	-	24	-	-	-	-	4	20	-	-	-	-	-		
\$11.00 to \$11.99...	5	4	2	-	60	{	-	-	-	40	50	-	1	17	1	10		
\$12.00 to \$12.99...	-	-	-	-	43		6	1	5	-	7	-	-				-	-
\$13.00 to \$13.99...	-	-	-	-	25	-	2	2	-	-	23	1	-	-	-	-		
\$14.00 to \$14.99...	-	-	-	-	11	-	4	2	2	2	5	-	-	-	-	-		
\$15.00 to \$15.99...	-	-	-	-	22	-	-	-	-	-	22	-	-	-	-	-		
\$16.00 to \$19.99...	-	-	-	-	12	2	-	-	-	-	10	1	-	-	-	-		
\$20.00 to \$24.99...	-	-	-	-	15	-	-	-	-	-	15	-	-	-	-	14		
\$25.00 and over....	-	-	-	-	8	2	1	-	1	-	5	2	-	-	-	-		

See footnotes at end of table.

TABLE 6H. Drilling Statistics for Oil, Gas, Dry, and Service Wells, by Average Cost Per Foot: 1963--Continued

Part II - Number of Wells Drilled, by Geographic Areas

Average cost per foot	West South Central--Continued						Mountain								Pacific		
	Texas--Continued						Total	Montana	Wyoming	Colorado	New Mexico			Idaho, Arizona, Utah, and Nevada	Total	California	Washington, Oregon, and Alaska
	North Central Texas B	East Texas A	East Texas B	West Texas A	West Texas B	Texas Pan-handle					Total	East New Mexico	West New Mexico				
DRY HOLES																	
Total.....	746	117	219	714	227	161	1,405	174	422	373	316	197	119	120	541	527	14
Less than \$2.00....	57	31	22	30	12	1	68	4	8	51	5	4	1	-	3	3	-
\$2.00 to \$2.99.....	152	7	31	40	16	-	161	5	16	107	32	18	14	1	9	8	1
\$3.00 to \$3.99.....	110	26	15	37	29	4	99	15	12	58	14	13	1	-	40	40	-
\$4.00 to \$4.99.....	263	8	19	73	42	13	48	5	24	13	4	4	-	2	54	54	-
\$5.00 to \$5.99.....	77	7	32	35	22	11	199	8	91	75	21	14	7	4	18	18	-
\$6.00 to \$6.99.....	36	1	4	20	37	46	165	19	41	18	81	9	72	6	10	10	-
\$7.00 to \$7.99.....	43	7	66	188	11	14	73	-	61	4	8	8	-	-	34	34	-
\$8.00 to \$8.99.....	8	4	8	47	15	17	70	10	34	5	10	8	2	11	16	16	-
\$9.00 to \$9.99.....	-	8	2	26	11	22	133	57	31	11	20	20	-	14	58	58	-
\$10.00 to \$10.99...	-	1	4	27													
\$11.00 to \$11.99...	-	5	-	72	19	25	45	17	12	2	7	7	-	7	15	14	1
\$12.00 to \$12.99...	-	1	-	13													
\$13.00 to \$13.99...	-	3	1	11	-	1	37	2	15	3	22	21	1	13	7	7	-
\$14.00 to \$14.99...	-	-	9	1													
\$15.00 to \$15.99...	-	6	-	45	3	1	19	1	5	1	17	12	5	1	37	36	1
\$16.00 to \$16.99...	-		-	2	1	6											
\$17.00 to \$17.99...	-	-	2	1	-	-	11	-	-	-	-	-	-	-	-	-	-
\$18.00 to \$18.99...	-	-	2	1	-	-	11	4	-	-	12	6	6	6	-	-	-
\$19.00 to \$19.99...	-	-	3	14	2	3	17	1	9	5	1	-	1	3	-	-	-
\$20.00 to \$20.99...	-	-		-	-	-											
\$21.00 to \$21.99...	-	-	-	1	-	-	4	-	1	-	-	-	-	3	2	2	-
\$22.00 to \$22.99...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$23.00 to \$23.99...	-	-	1	24	-	3	19	6	2	-	-	-	-	11	17	17	-
\$24.00 to \$24.99...	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$25.00 to \$25.99...	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-
\$26.00 to \$26.99...	-	-	-	4	-	-	1	-	-	-	1	-	1	-	-	-	-
\$27.00 to \$27.99...	-	-	-	-	-	-	5	-	-	1	-	-	-	4	21	21	-
\$28.00 to \$29.99...	-	-	-	-	-	-	11	-	-	2	-	-	-	9	-	-	-
\$30.00 to \$31.99...	-	-	-	-	6	-	18	-	-	-	17	16	1	1	-	-	-
\$32.00 to \$34.99...	-	-	-	-													
\$35.00 to \$39.99...	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
\$40.00 to \$44.99...	-	-	-	-	-	-	7	-	4	-	-	-	-	3	16	6	10
\$45.00 and over....	-	2	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
SERVICE WELLS																	
Total.....	75	15	10	224	31	34	182	14	82	16	57	50	7	13	12	12	-
Less than \$2.00....	8	-	-	4	1	1	6	-	-	1	4	4	-	1	2	2	-
\$2.00 to \$2.99.....	28	8	-	15	7	4	6	1	-	2	2	2	-	1	-	-	-
\$3.00 to \$3.99.....	20	7	7	36	15	8	21	6	13	7	1	1	1	-	-	-	-
\$4.00 to \$4.99.....																	
\$5.00 to \$5.99.....	7	-	-	11	-	10	4	-	-	-	4	4	-	-	1	1	-
\$6.00 to \$6.99.....	1	-	-	18	2	7	19	-	-	-	15	10	5	-	-	-	-
\$7.00 to \$7.99.....	-	-	2	14	-	-	-	-	-	-	-	-	-	-	3	3	-
\$8.00 to \$8.99.....	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$9.00 to \$9.99.....	10	-	-	39	6	-	4	-	15	-	5	5	-	-	-	-	-
\$10.00 to \$10.99...																	
\$11.00 to \$11.99...	-	-	-	49	-	-	4	-	-	-	-	-	-	-	-	-	-
\$12.00 to \$12.99...	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-
\$13.00 to \$13.99...	-	-	-	26	-	4	2	-	-	-	-	-	-	-	1	1	-
\$14.00 to \$14.99...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
\$15.00 to \$15.99...	-	-	-	-	-	-	2	-	-	-	-	-	-	-	3	3	-
\$16.00 to \$19.99...	-	-	-	-	-	-	6	1	54	6	20	19	1	-	1	1	-
\$20.00 to \$24.99...	-	-	-	10	-	-	11	5	-	-	-	-	-	-	-	-	-
\$25.00 and over....	1	-	-	2	-	-	73	1	-	-	-	-	-	11	1	1	-

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

TABLE 7A. Supplies Used, by Geographic Areas and Type of Operation: 1963 and 1958

(For the quantity and total cost of purchased fuels and electric energy used and for the quantity of crude petroleum and natural gas produced and used for fuel, see table 3)

Geographic area and type of operation	Cost of supplies used (\$1,000)	Steel mill shapes and forms <sup>1</sup>		Cost of other supplies <sup>2</sup> (\$1,000)	Cost of supplies undistributed by type (\$1,000)	Geographic area and type of operation	Cost of supplies used (\$1,000)	Steel mill shapes and forms <sup>1</sup>		Cost of other supplies <sup>2</sup> (\$1,000)	Cost of supplies undistributed by type (\$1,000)
		Quantity (short tons)	Cost (\$1,000)					Quantity (short tons)	Cost (\$1,000)		
United States, total.....	1,036,315	1,431,360	362,042	532,263	142,010	West South Central--Continued					
Crude petroleum subindustry..	903,024	1,262,297	318,831	458,538	125,655	Texas.....	344,485	474,771	120,266	178,132	46,087
Natural gas subindustry.....	133,291	169,063	43,211	73,725	16,355	Crude petroleum.....	301,439	411,564	104,609	155,855	40,975
<u>Division, State, and Subindustry</u>						Natural gas.....	43,046	63,207	15,657	22,277	5,112
Middle Atlantic, total.....	5,489	5,343	1,257	2,192	2,040	Texas Gulf Coast A.....	55,981	72,842	19,598	31,659	4,724
Crude petroleum.....	2,647	1,797	465	1,167	1,015	Crude petroleum.....	51,622	68,604	18,427	29,215	3,980
Natural gas.....	2,842	3,546	792	1,025	1,025	Natural gas.....	4,359	4,238	1,171	2,444	744
New York.....	1,279	943	256	575	448	Texas Gulf Coast B.....	22,390	27,901	7,056	11,617	3,717
Pennsylvania.....	4,210	4,400	1,001	1,617	1,592	Crude petroleum.....	10,234	13,080	3,274	5,711	1,249
Crude petroleum.....	1,679	1,287	324	714	641	Natural gas.....	12,156	14,821	3,782	5,906	2,468
Natural gas.....	2,531	3,113	677	903	951	South Texas.....	37,364	72,099	18,280	17,481	1,603
East North Central, total.....	28,402	23,003	5,786	11,529	11,087	Crude petroleum.....	27,971	57,164	14,644	11,724	1,603
Crude petroleum.....	26,620	22,052	5,564	10,555	10,501	Natural gas.....	9,393	14,935	3,636	5,757	-
Natural gas.....	1,782	951	222	974	586	Southwest Texas.....	5,544	5,860	1,454	2,397	1,693
Ohio.....	3,742	3,646	867	1,177	1,698	Crude petroleum.....	4,296	4,349	1,061	1,617	1,618
Crude petroleum.....	2,575	2,695	645	803	1,127	Natural gas.....	1,248	1,511	393	780	75
Natural gas.....	1,167	951	222	374	571	North Central Texas A.....	23,369	27,593	6,595	8,407	8,367
Indiana.....	5,832	3,967	1,027	1,207	3,598	Crude petroleum.....	21,069	21,596	5,097	7,637	8,335
Illinois.....	14,769	10,678	2,746	7,138	4,885	Natural gas.....	2,300	5,997	1,498	770	32
Michigan.....	4,059	4,712	1,146	2,007	906	North Central Texas B.....	11,361	9,557	2,245	5,806	3,310
West North Central, total.....	45,080	51,627	13,502	22,696	8,882	Crude petroleum.....	10,911	9,002	2,105	5,774	3,032
Crude petroleum.....	41,841	49,482	12,968	20,946	7,927	Natural gas.....	450	555	140	32	278
Natural gas.....	3,239	2,145	534	1,750	955	East Texas A.....	9,050	8,638	2,022	4,343	2,685
North Dakota.....	5,757	9,788	2,653	3,006	98	Crude petroleum.....	8,633	7,940	1,847	4,259	2,527
Nebraska.....	4,320	5,299	1,225	1,958	1,137	Natural gas.....	417	698	175	84	158
Kansas.....	34,428	35,929	9,497	17,352	7,579	East Texas B.....	22,009	27,747	5,951	12,587	3,471
Crude petroleum.....	31,236	33,784	8,963	15,616	6,657	Crude petroleum.....	19,501	24,690	5,166	11,142	3,193
Natural gas.....	3,192	2,145	534	1,736	922	Natural gas.....	2,508	3,057	785	1,445	278
South Atlantic, total.....	9,851	8,029	2,681	5,550	1,620	West Texas A.....	114,855	161,657	41,608	61,424	11,823
Crude petroleum.....	3,797	3,479	923	2,874	-	Crude petroleum.....	113,948	160,870	41,411	60,920	11,617
Natural gas.....	6,054	4,550	1,758	2,676	1,620	Natural gas.....	907	787	197	504	206
West Virginia.....	9,325	7,551	2,551	5,177	1,597	West Texas B.....	17,502	22,672	5,935	9,981	1,586
Crude petroleum.....	3,423	3,281	870	2,553	-	Crude petroleum.....	16,974	21,232	5,575	9,818	1,581
Natural gas.....	5,902	4,270	1,681	2,624	1,597	Natural gas.....	528	1,440	360	163	5
East South Central, total.....	27,450	29,044	7,699	12,722	7,029	Texas Panhandle.....	25,060	38,205	9,522	12,430	3,108
Crude petroleum.....	25,533	28,070	7,455	12,563	5,515	Crude petroleum.....	16,280	23,037	6,002	8,038	2,240
Natural gas.....	1,917	974	244	159	1,514	Natural gas.....	8,780	15,168	3,520	4,392	868
Kentucky.....	7,553	5,744	1,506	2,445	3,602	Mountain, total.....	100,291	160,576	34,462	56,967	8,862
Alabama.....	1,798	2,874	839	959	-	Crude petroleum.....	86,454	144,667	30,329	48,062	8,063
Mississippi.....	18,047	20,411	5,350	9,193	3,504	Natural gas.....	13,837	15,909	4,133	8,905	799
West South Central, total.....	718,143	1,072,288	275,819	373,594	68,730	Montana.....	9,269	16,704	3,693	4,708	868
Crude petroleum.....	619,045	934,698	241,322	317,269	60,454	Wyoming.....	27,326	37,775	8,545	15,217	3,564
Natural gas.....	99,098	137,590	34,497	56,325	8,276	Colorado.....	8,940	10,263	2,004	5,521	1,415
Arkansas.....	7,477	5,432	1,481	3,805	2,191	Crude petroleum.....	7,669	9,845	1,869	4,496	1,304
Crude petroleum.....	5,397	3,772	1,077	3,087	1,233	Natural gas.....	1,271	418	135	1,025	111
Natural gas.....	2,080	1,660	404	718	958	New Mexico.....	42,164	70,997	14,998	24,356	2,904
Louisiana.....	279,647	476,042	124,144	149,249	6,254	Crude petroleum.....	33,279	59,615	12,064	18,735	2,480
Crude petroleum.....	230,392	407,472	106,653	118,717	5,022	Natural gas.....	8,885	11,382	2,934	5,527	424
Natural gas.....	49,255	68,570	17,491	30,532	1,232	East New Mexico.....	30,139	55,972	11,142	16,666	2,331
North Louisiana.....	17,321	27,114	6,806	9,063	1,452	Crude petroleum.....	29,278	54,864	10,865	16,082	2,331
Crude petroleum.....	14,750	23,703	5,901	7,859	990	Natural gas.....	861	1,108	277	584	-
Natural gas.....	2,571	3,411	905	1,204	462	West New Mexico.....	12,025	15,025	3,856	7,596	573
South Louisiana.....	262,326	448,928	117,338	140,186	4,802	Crude petroleum.....	4,001	4,751	1,199	2,653	149
Crude petroleum.....	215,642	383,769	100,752	110,858	4,032	Natural gas.....	8,024	10,274	2,657	4,943	424
Natural gas.....	46,684	65,159	16,586	29,328	770	Utah.....	11,973	24,559	5,143	6,711	119
Oklahoma.....	86,534	116,043	29,928	42,408	14,198	Pacific, total.....	101,609	81,450	20,836	47,013	33,760
Crude petroleum.....	81,817	111,890	28,983	39,610	13,224	Crude petroleum.....	97,087	78,052	19,805	45,102	32,180
Natural gas.....	4,717	4,153	945	2,798	974	Natural gas.....	4,522	3,398	1,031	1,911	1,580
						California.....	95,618	77,412	19,591	42,941	33,086
						Alaska.....	5,292	3,914	1,208	3,414	670

See footnotes at end of table.

TABLE 7A. Supplies Used, by Geographic Areas and Type of Operation: 1963 and 1958—Continued

Geographic area and type of operation	Cost of supplies used (\$1,000)	Steel mill shapes and forms <sup>1</sup>		Cost of other supplies <sup>2</sup> (\$1,000)	Cost of supplies undistributed by type (\$1,000)	Geographic area and type of operation	Cost of supplies used (\$1,000)	Steel mill shapes and forms <sup>1</sup>		Cost of other supplies <sup>2</sup> (\$1,000)	Cost of supplies undistributed by type (\$1,000)
		Quantity (short tons)	Cost (\$1,000)					Quantity (short tons)	Cost (\$1,000)		
<u>Type of Operation</u>						<u>Type of Operation—Continued</u>					
United States, total.....	1,036,315	1,431,360	362,042	532,263	142,010	Producing operations—Continued					
Producing operations, total.....	1,022,943	1,423,154	359,809	524,972	138,162	Oil and gas wells.....	845,195	1,292,264	326,810	450,560	67,825
With drilling.....	960,782	1,404,813	353,791	499,401	107,590	With drilling.....	826,139	1,280,361	322,281	438,446	65,412
Without drilling.....	62,161	18,341	6,018	25,571	30,572	Without drilling.....	19,056	11,903	4,529	12,114	2,413
Oil wells only.....	156,612	108,062	27,326	64,461	64,825	Gas wells.....	21,136	22,828	5,673	9,951	5,512
With drilling.....	117,238	103,020	26,141	52,604	38,493	With drilling.....	17,405	21,432	5,369	8,351	3,685
Without drilling.....	39,374	5,042	1,185	11,857	26,332	Without drilling.....	3,731	1,396	304	1,600	1,827
						Nonproducing operations.....	13,372	8,206	2,233	7,291	3,848

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Represents such items as casing, tubing, pipe, plates, piling, drill steel bars, wire, and structural shapes.<sup>2</sup>Includes the cost of gas purchased for gas lift and repressuring as follows:

Item	1963		1958	
	Quantity (million cu. ft.)	Delivered cost (\$1,000)	Quantity (million cu. ft.)	Delivered cost (\$1,000)
United States.....	58,771	9,532	71,447	8,078
Crude petroleum subindustry.....	54,048	8,925	(NA)	(NA)
Natural gas subindustry.....	4,723	607	(NA)	(NA)
West South Central.....	45,887	6,951	55,199	5,417
Louisiana.....	4,923	492	6,890	738
Oklahoma.....	5,518	741	6,049	436
Texas.....	35,080	5,633	37,439	3,314
West Texas B.....	18,861	3,019	(NA)	(NA)
Producing operations, total.....	58,771	9,532	(NA)	(NA)
With drilling.....	55,467	9,065	(NA)	(NA)
Without drilling.....	3,304	467	(NA)	(NA)
Oil and gas wells operations.....	53,423	8,606	(NA)	(NA)

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954

Geographic area and type of operation	Aggregate horsepower per production worker		1963 (1,000 horsepower)							
	1963	1954 <sup>1</sup>	Aggregate horsepower (prime movers and electric motors driven by purchased energy)	Prime movers				Electric motors		
				Total	Highway type	All other equipment		Total	Driven by--	
						Driving generators	Not driving generators		Purchased energy	Energy generated at same establishment
United States, total.....	171	83	14,235	11,385	5,578	333	5,474	2,992	2,850	142
Crude petroleum subindustry.....	174	85	12,504	9,762	4,725	258	4,779	2,867	2,742	125
Natural gas subindustry.....	148	59	1,731	1,623	853	75	695	125	108	17
<u>Division, State, and Subindustry</u>										
Middle Atlantic, total.....	124	66	369	312	154	23	135	65	57	8
Crude petroleum.....	132	70	208	153	82	(2)	71	55	55	(2)
Natural gas.....	116	57	161	159	72	23	64	10	2	8
New York.....	132	63	65	54	27	-	27	11	11	-
Crude petroleum.....	151	63	50	39	20	-	19	11	11	-
Pennsylvania.....	123	66	303	257	127	23	107	54	46	8
Crude petroleum.....	126	71	157	113	62	(2)	51	44	44	(2)
Natural gas.....	119	56	146	144	65	23	56	10	2	8
East North Central, total.....	118	65	706	551	263	7	281	159	155	4
Crude petroleum.....	118	67	671	518	243	7	268	157	153	4
Natural gas.....	113	26	35	33	20	-	13	2	2	-
Ohio.....	118	50	130	119	55	-	64	11	11	(2)
Crude petroleum.....	119	64	102	92	38	-	54	10	10	(2)
Natural gas.....	116	22	28	27	17	-	10	1	1	-
Indiana.....	104	68	65	48	24	-	24	17	17	(2)
Crude petroleum.....	104	(NA)	65	48	24	-	24	17	17	(2)
Illinois.....	102	63	354	239	126	4	109	117	115	2
Crude petroleum.....	102	(NA)	354	239	126	4	109	117	115	2
Michigan.....	199	90	157	145	58	3	84	14	12	2
Crude petroleum.....	208	90	151	140	56	3	82	13	11	2
West North Central, total.....	163	87	1,021	851	401	19	431	172	170	2
Crude petroleum.....	166	87	953	794	361	18	415	161	159	2
Natural gas.....	125	81	68	57	40	1	16	11	11	-
North Dakota.....	302	83	85	78	30	1	47	7	7	-
Nebraska.....	229	121	67	57	19	1	37	10	10	(2)
Kansas.....	150	86	855	704	347	17	340	153	151	2
Crude petroleum.....	153	86	787	647	307	16	324	142	140	2
Natural gas.....	125	81	68	57	40	1	16	11	11	-
South Atlantic, total.....	117	58	303	276	122	37	117	29	27	2
Crude petroleum.....	126	102	144	123	59	37	117	23	21	2
Natural gas.....	109	31	159	153	63			6	6	(2)
West Virginia.....	114	57	292	266	118	37	111	28	26	2
Crude petroleum.....	123	103	136	116	57	37	111	22	20	2
Natural gas.....	108	31	156	150	61			6	6	(2)
East South Central, total.....	123	67	384	318	162	2	154	68	66	2
Crude petroleum.....	141	72	343	278	138	2	154	67	65	2
Natural gas.....	59	27	41	40	24			1	1	-
Kentucky.....	76	46	161	127	65	1	61	35	34	1
Crude petroleum.....	88	48	128	95	45	1	61	34	33	1
Natural gas.....	51	32	33	32	20			1	1	-
Alabama.....	288	65	23	11	9	-	2	12	12	-
Mississippi.....	211	120	198	179	88	1	90	20	19	1
Crude petroleum.....	212	127	190	171	83	1	90	20	19	1
Natural gas.....	190	(NA)	8	8	5			-	-	-
West South Central, total.....	182	80	8,599	6,857	3,325	204	3,328	1,829	1,742	87
Crude petroleum.....	180	80	7,560	5,891	2,851	190	2,850	1,748	1,669	79
Natural gas.....	188	79	1,039	966	474	14	478	81	73	8
Arkansas.....	148	93	132	107	42	(2)	65	25	25	(2)
Crude petroleum.....	151	96	116	92	38	(2)	54	24	24	(2)
Natural gas.....	128	19	16	15	4	(2)	11	1	1	-

See footnotes at end of table.

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954—Continued

Geographic area and type of operation	Aggregate horsepower per production worker		1963 (1,000 horsepower)							
	1963	1954 <sup>1</sup>	Aggregate horsepower (prime movers and electric motors driven by purchased energy)	Prime movers				Electric motors		
				Total	Highway type	All other equipment		Total	Driven by--	
						Driving generators	Not driving generators		Purchased energy	Energy generated at same establishment
Division, State, and Subindustry—Con.										
West South Central, total—Continued										
Louisiana.....	133	80	1,407	1,335	460	101	774	114	72	42
Crude petroleum.....	135	80	1,146	1,082	340	94	648	102	64	38
Natural gas.....	123	67	261	253	120	7	126	12	8	4
North Louisiana.....	163	(NA)	349	314	136	13	165	37	35	2
Crude petroleum.....	161	(NA)	262	232	102	11	119	32	30	2
Natural gas.....	170	(NA)	87	82	34	2	46	5	5	-
South Louisiana.....	125	(NA)	1,058	1,021	324	88	609	77	37	40
Crude petroleum.....	129	(NA)	884	850	238	83	529	70	34	36
Natural gas.....	108	(NA)	174	171	86	5	80	7	3	4
Oklahoma.....	146	66	1,439	1,197	585	20	592	248	242	6
Crude petroleum.....	144	66	1,360	1,125	547	19	559	239	235	4
Natural gas.....	200	54	79	72	38	1	33	9	7	2
Texas.....	216	84	5,622	4,218	2,238	83	1,897	1,442	1,404	38
Crude petroleum.....	214	84	4,938	3,592	1,926	77	1,589	1,382	1,346	36
Natural gas.....	237	93	684	626	312	6	308	60	58	2
Texas Gulf Coast A.....	160	(NA)	678	622	344	12	266	59	56	3
Crude petroleum.....	155	(NA)	574	519	311	11	197	58	55	3
Natural gas.....	191	(NA)	104	103	33	1	69	1	1	(Z)
Texas Gulf Coast B.....	202	(NA)	241	230	95	3	132	13	11	2
Crude petroleum.....	191	(NA)	134	127	53	1	73	9	7	2
Natural gas.....	219	(NA)	107	103	42	2	59	4	4	-
South Texas.....	203	(NA)	458	423	219	13	191	39	35	4
Crude petroleum.....	188	(NA)	322	292	145	11	136	33	30	3
Natural gas.....	252	(NA)	136	131	74	2	55	6	5	1
Southwest Texas.....	257	(NA)	200	128	70	2	56	73	72	1
Crude petroleum.....	255	(NA)	177	109	62	2	45	68	68	(Z)
Natural gas.....	277	(NA)	23	19	8	-	11	5	4	1
North Central Texas A.....	160	(NA)	446	333	163	12	158	115	113	2
Crude petroleum.....	155	(NA)	419	307	152	11	144	114	112	2
Natural gas.....	303	(NA)	27	26	11	1	14	1	1	-
North Central Texas B.....	180	(NA)	338	261	140	4	117	78	77	1
Crude petroleum.....	184	(NA)	330	253	136	4	113	78	77	1
Natural gas.....	104	(NA)	8	8	4	(Z)	4	(Z)	(Z)	-
East Texas A.....	260	(NA)	217	148	78	1	69	70	69	1
Crude petroleum.....	268	(NA)	210	142	75	1	66	69	68	1
Natural gas.....	137	(NA)	7	6	3	-	3	1	1	-
East Texas B.....	172	(NA)	500	381	189	8	184	125	119	6
Crude petroleum.....	171	(NA)	450	332	168	8	156	124	118	6
Natural gas.....	186	(NA)	50	49	21	-	28	1	1	-
West Texas A.....	269	(NA)	1,779	1,235	668	22	545	553	544	9
Crude petroleum.....	269	(NA)	1,760	1,216	661	22	533	553	544	9
Natural gas.....	253	(NA)	19	19	7	-	12	(Z)	(Z)	-
West Texas B.....	414	(NA)	296	113	49	4	60	190	183	7
Crude petroleum.....	421	(NA)	290	108	45	4	59	189	182	7
Natural gas.....	222	(NA)	6	5	4	-	1	1	1	-
Texas Panhandle.....	266	(NA)	469	344	223	2	119	127	125	2
Crude petroleum.....	243	(NA)	272	187	118	2	67	87	85	2
Natural gas.....	307	(NA)	197	157	105	-	52	40	40	-
Mountain, total.....	194	97	1,281	955	552	19	384	336	326	10
Crude petroleum.....	214	99	1,113	796	431	17	349	325	316	9
Natural gas.....	120	76	168	158	121	2	35	11	10	1
Montana.....	184	124	123	105	56	2	47	19	18	1
Crude petroleum.....	215	120	120	102	53	2	47	19	18	1
Wyoming.....	227	91	403	256	163	8	85	151	147	4
Crude petroleum.....	224	(NA)	380	241	150	7	84	143	139	4
Natural gas.....	280	(NA)	23	15	13	1	1	8	8	-
Colorado.....	166	128	184	147	60	1	86	38	37	1
Crude petroleum.....	187	(NA)	161	124	43	1	80	38	37	1
Natural gas.....	93	(NA)	23	23	17	(Z)	6	(Z)	(Z)	(Z)

See footnotes at end of table.



TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954—Continued

Geographic area and type of operation	Aggregate horsepower per production worker		1963 (1,000 horsepower)							
			Aggregate horsepower (prime movers and electric motors driven by purchased energy)	Prime movers				Electric motors		
	1963	1954 <sup>1</sup>		Total	Highway type	All other equipment		Total	Driven by--	
						Driving generators	Not driving generators		Purchased energy	Energy generated at same establishment
Division, State, and Subindustry—Con.										
Mountain—Continued										
New Mexico.....	178	83	491	395	250	7	138	98	96	2
Crude petroleum.....	204	88	380	286	166	6	114	95	94	1
Natural gas.....	125	46	111	109	84	1	24	3	2	1
East New Mexico.....	197	(NA)	360	271	154	6	111	90	89	1
Crude petroleum.....	198	(NA)	343	255	149	6	100	89	88	1
Natural gas.....	185	(NA)	17	16	5	-	11	1	1	-
West New Mexico.....	141	(NA)	131	124	96	1	27	8	7	1
Crude petroleum.....	290	(NA)	38	32	17	1	14	6	6	(Z)
Natural gas.....	117	(NA)	93	92	79	(Z)	13	2	1	1
Utah.....	275	76	78	50	22	1	27	30	28	2
Crude petroleum.....	324	(NA)	70	42	18	1	23	30	28	2
Natural gas.....	121	(NA)	8	8	4	-	4	(Z)	(Z)	(Z)
Pacific, total.....	183	128	1,573	1,265	599	22	644	335	308	27
Crude petroleum.....	185	126	1,514	1,209	560	22	627	332	305	27
Natural gas.....	140	202	59	56	39	-	17	3	3	(Z)
California.....	185	128	1,545	1,239	589	22	628	333	306	27
Alaska.....	123	(NA)	22	20	7	-	13	2	2	-
Type of Operation										
All types of operation, total.....	170	83	14,235	11,385	5,578	333	5,474	2,992	2,850	142
Producing operations, total.....	170	83	14,019	11,199	5,578	321	5,300	2,960	2,820	140
With drilling.....	174	85	11,532	9,106	4,602	296	4,208	2,546	2,426	120
Without drilling.....	154	68	2,487	2,093	976	25	1,092	414	394	20
Oil wells only.....	153	81	3,698	2,932	1,319	68	1,545	809	766	43
With drilling.....	158	87	2,176	1,701	763	55	883	508	475	33
Without drilling.....	148	65	1,522	1,231	556	13	662	301	291	10
Oil and gas wells.....	179	86	9,832	7,810	4,055	229	3,526	2,111	2,022	89
With drilling.....	179	86	9,047	7,125	3,703	221	3,201	2,008	1,922	86
Without drilling.....	180	97	785	685	352	8	325	103	100	3
Gas wells only.....	142	45	489	457	204	24	229	40	32	8
With drilling.....	155	46	309	280	136	20	124	30	29	1
Without drilling.....	124	41	180	177	68	4	105	10	3	7
Nonproducing operations.....	212	89	216	186	-	12	174	32	30	2

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
 (Z) Less than one-half of the unit of measure specified.  
<sup>1</sup>Excludes data for Alaska.

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with an average of-						
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
INDUSTRY 1311.—CRUDE PETROLEUM AND NATURAL GAS								
Establishments, total.....number..	14,378	13,994	204	120	41	13	6	
Reporting water use, total.....do....	7,564	7,193	193	119	40	13	6	
By source of water:								
Utility.....do....	638	598	25	12	3	-	-	
Other than utility.....do....	5,947	5,640	152	99	37	13	6	
Source not specified.....do....	979	955	16	8	-	-	-	
By quantity of water intake:								
Under 1 million gallons.....do....	6,471	6,363	73	30	4	1	-	
1 to 9 million gallons.....do....	399	352	32	14	1	-	-	
10 to 19 million gallons.....do....	153	132	13	4	2	1	1	
20 to 99 million gallons.....do....	281	225	34	17	3	2	-	
100 million gallons and over.....do....	260	121	41	54	30	9	5	
Employees.....do....	<sup>1</sup> 145,244	50,036	14,053	18,167	14,663	9,367	9,985	
Establishments reporting water use.....do....	<sup>2</sup> 104,447	38,804	<u>46,291</u>	(D)	(D)	9,367	9,985	
Value added in mining.....\$1,000..	9,016,372	2,908,744	977,602	1,498,036	1,526,669	1,078,343	1,026,978	
Value added at establishments reporting water use.....do....	<sup>1</sup> 8,291,880	2,219,674	<u>3,966,885</u>	(D)	(D)	1,078,343	1,026,978	
Crude Petroleum Subindustry								
Establishments, total.....number..	12,326	12,005	171	96	39	9	6	
Reporting water use, total.....do....	6,367	6,057	161	96	38	9	6	
By source of water:								
Utility.....do....	548	516	20	9	3	-	-	
Other than utility.....do....	5,001	4,741	129	81	35	9	6	
Source not specified.....do....	818	800	12	6	-	-	-	
By quantity of water intake:								
Under 1 million gallons.....do....	5,346	5,274	51	18	3	-	-	
1 to 9 million gallons.....do....	366	330	26	9	1	-	-	
10 to 19 million gallons.....do....	142	121	13	4	2	1	1	
20 to 99 million gallons.....do....	268	217	32	15	3	1	-	
100 million gallons and over.....do....	245	115	39	50	29	7	5	
Employees.....do....	<sup>1</sup> 125,842	42,822	11,781	14,236	<u>20,408</u>	(D)	9,985	
Establishments reporting water use.....do....	<sup>2</sup> 88,684	32,811	<u>45,888</u>	(D)	(D)	(D)	9,985	
Value added in mining.....\$1,000..	7,812,956	2,249,937	826,365	1,200,937	<u>2,508,739</u>	(D)	1,026,978	
Value added at establishments reporting water use.....do....	7,131,170	1,596,570	<u>4,507,622</u>	(D)	(D)	(D)	1,026,978	
Natural Gas Subindustry								
Establishments, total.....number..	2,052	1,989	33	24	2	4	-	
Reporting water use, total.....do....	1,197	1,136	32	23	2	4	-	
By source of water:								
Utility.....do....	90	82	5	3	-	-	-	
Other than utility.....do....	946	899	23	18	2	4	-	
Source not specified.....do....	161	155	4	2	-	-	-	
By quantity of water intake:								
Under 1 million gallons.....do....	1,125	1,089	22	12	1	1	-	
1 to 9 million gallons.....do....	33	22	6	5	-	-	-	
10 to 19 million gallons.....do....	11	11	-	-	-	-	-	
20 to 99 million gallons.....do....	13	8	2	2	-	1	-	
100 million gallons and over.....do....	15	6	2	4	1	2	-	
Employees.....do....	<sup>1</sup> 19,402	7,214	2,272	3,931	3,622	(D)	-	
Establishments reporting water use.....do....	<sup>2</sup> 15,763	5,993	<u>6,148</u>	(D)	<u>3,622</u>	(D)	-	
Value added in mining.....\$1,000..	1,203,416	658,807	151,237	297,099	<u>96,273</u>	(D)	-	
Value added at establishments reporting water use.....do....	1,160,710	623,104	<u>441,333</u>	(D)	<u>96,273</u>	(D)	-	

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.

<sup>1</sup>Includes figures for separately reported central offices and related facilities. These were not distributed by size of establishments.<sup>2</sup>Excludes figures for separately reported central offices and related facilities.

**TABLE 7D. Lease Tanks and Crude Stocks at the End of 1963, by Geographic Areas and Type of Operation**

Industry, subindustry, geographic area, and type of operation	Lease tanks		Lease stocks (1,000 barrels)	Industry, subindustry, geographic area, and type of operation	Lease tanks		Lease stocks (1,000 barrels)
	Number	Capacity (1,000 barrels)			Number	Capacity (1,000 barrels)	
13.--Oil and gas extraction.....	222,232	99,858	31,939	<u>Division, State, and Subindustry--Continued</u>			
1311.--Crude petroleum and natural gas.	219,435	99,218	31,727	West South Central--Continued			
138.--Oil and gas field services.....	2,797	640	212	Louisiana--Continued			
United States, total.....	222,232	99,858	31,939	South Louisiana.....	8,314	8,620	4,188
Crude petroleum subindustry.....	203,619	93,154	29,631	Crude petroleum subindustry.....	6,584	7,146	3,554
Natural gas subindustry.....	15,816	6,064	2,096	Natural gas subindustry.....	1,684	1,449	628
Oil and gas field services.....	2,797	640	212	Oil and gas field services.....	46	25	6
<u>Division, State, and Subindustry</u>				Oklahoma.....	34,228	7,355	2,209
Middle Atlantic.....	2,250	352	87	Crude petroleum subindustry.....	31,906	6,861	2,051
Crude petroleum subindustry.....	2,162	349	86	Texas.....	93,284	42,364	11,343
New York.....	400	74	14	Crude petroleum subindustry.....	84,266	39,118	10,344
Crude petroleum subindustry.....	383	72	14	Natural gas subindustry.....	7,934	2,942	899
Pennsylvania.....	1,848	277	72	Oil and gas field services.....	1,034	304	100
Crude petroleum subindustry.....	1,777	275	72	Texas Gulf Coast A.....	11,148	4,120	1,333
East North Central.....	19,261	4,961	1,014	Crude petroleum subindustry.....	10,413	3,798	1,241
Crude petroleum subindustry.....	18,787	4,900	996	Natural gas subindustry.....	623	267	77
Natural gas subindustry.....	315	34	12	Oil and gas field services.....	112	55	15
Oil and gas field services.....	159	27	6	Texas Gulf Coast B.....	4,201	2,001	599
Ohio.....	2,420	344	175	Crude petroleum subindustry.....	2,393	1,232	372
Crude petroleum subindustry.....	2,081	308	96	Natural gas subindustry.....	1,732	749	222
Indiana.....	4,146	265	75	South Texas.....	5,871	2,836	1,031
Crude petroleum subindustry.....	4,132	263	75	Crude petroleum subindustry.....	4,520	2,140	841
Illinois.....	10,025	3,810	622	Natural gas subindustry.....	1,290	678	184
Crude petroleum subindustry.....	9,906	3,788	617	Southwest Texas.....	1,747	648	251
Oil and gas field services.....	119	22	5	Crude petroleum subindustry.....	1,471	524	192
Michigan.....	2,670	542	168	Natural gas subindustry.....	251	118	57
West North Central.....	23,228	6,366	1,834	North Central Texas A.....	16,316	2,943	874
Crude petroleum subindustry.....	21,846	6,044	1,706	Crude petroleum subindustry.....	14,656	2,603	770
Natural gas subindustry.....	1,104	262	110	Natural gas subindustry.....	1,442	309	89
Oil and gas field services.....	278	60	18	Oil and gas field services.....	218	31	15
North Dakota.....	1,238	742	248	North Central Texas B.....	8,018	1,945	699
Nebraska.....	1,420	470	136	Crude petroleum subindustry.....	7,667	1,879	674
Crude petroleum subindustry.....	1,390	463	134	Natural gas subindustry.....	270	53	18
Kansas.....	20,539	5,144	1,446	East Texas A.....	3,927	887	322
Crude petroleum subindustry.....	19,200	4,834	1,322	Crude petroleum subindustry.....	3,618	779	289
Natural gas subindustry.....	1,104	262	110	Natural gas subindustry.....	127	52	15
Oil and gas field services.....	235	48	14	Oil and gas field services.....	182	56	18
South Atlantic.....	1,282	202	70	East Texas B.....	8,449	3,669	980
Crude petroleum subindustry.....	1,061	185	67	Crude petroleum subindustry.....	7,595	3,398	903
West Virginia.....	1,261	186	63	Natural gas subindustry.....	763	268	76
Crude petroleum subindustry.....	1,040	169	60	West Texas A.....	25,063	20,287	4,143
East South Central.....	5,391	2,158	759	Crude petroleum subindustry.....	24,812	20,175	4,104
Crude petroleum subindustry.....	5,070	2,083	738	Natural gas subindustry.....	100	42	16
Natural gas subindustry.....	234	57	17	Oil and gas field services.....	151	70	23
Oil and gas field services.....	87	18	4	West Texas B.....	3,975	1,681	641
Kentucky.....	2,680	442	158	Crude petroleum subindustry.....	3,904	1,647	633
Crude petroleum subindustry.....	2,485	417	154	Texas Panhandle.....	4,569	1,347	470
Natural gas subindustry.....	118	13	4	Crude petroleum subindustry.....	3,217	943	325
Alabama.....	289	215	101	Natural gas subindustry.....	1,311	396	143
Crude petroleum subindustry.....	289	215	101	Mountain.....	19,425	8,678	2,686
Mississippi.....	2,413	1,497	500	Crude petroleum subindustry.....	17,655	8,168	2,512
Crude petroleum subindustry.....	2,287	1,448	483	Natural gas subindustry.....	1,705	490	166
West South Central.....	142,928	60,515	18,450	Oil and gas field services.....	65	20	8
Crude petroleum subindustry.....	128,808	54,983	16,543	Montana.....	2,674	1,095	264
Natural gas subindustry.....	11,960	5,021	1,732	Wyoming.....	4,124	2,369	698
Oil and gas field services.....	2,160	511	175	Crude petroleum subindustry.....	3,711	2,255	665
Arkansas.....	2,193	673	207	Colorado.....	1,579	731	181
Crude petroleum subindustry.....	2,151	665	203	Crude petroleum subindustry.....	1,416	670	160
Louisiana.....	13,223	10,123	4,691	New Mexico.....	10,719	4,171	1,413
Crude petroleum subindustry.....	10,485	8,339	3,945	Crude petroleum subindustry.....	9,654	3,864	1,305
Natural gas subindustry.....	2,476	1,717	718	Natural gas subindustry.....	1,018	294	103
Oil and gas field services.....	262	67	28	East New Mexico.....	9,209	3,714	1,265
North Louisiana.....	4,889	1,503	503	Crude petroleum subindustry.....	9,041	3,659	1,245
Crude petroleum subindustry.....	3,901	1,193	391	Natural gas subindustry.....	121	42	15
Natural gas subindustry.....	792	268	90	West New Mexico.....	1,510	457	148
Oil and gas field services.....	196	42	22	Crude petroleum subindustry.....	613	205	60
				Natural gas subindustry.....	897	252	88
				Utah.....	314	300	119
				Crude petroleum subindustry.....	254	283	114

See footnotes at end of table.

TABLE 7D Lease Tanks and Crude Stocks at the End of 1963, by Geographic Areas and Type of Operation--Continued

Industry, subindustry, geographic area, and type of operation	Lease tanks		Lease stocks (1,000 barrels)	Industry, subindustry, geographic area, and type of operation	Lease tanks		Lease stocks (1,000 barrels)
	Number	Capacity (1,000 barrels)			Number	Capacity (1,000 barrels)	
<u>Division, State, and Subindustry--Continued</u>				<u>Type of Operation for the Crude Petroleum and Natural Gas Industry--Continued</u>			
Pacific.....	8,467	16,626	7,039	Producing operations--Continued			
Crude petroleum subindustry.....	8,230	16,442	6,983	Oil well operations only, total.....	58,947	15,973	4,936
California.....	8,438	16,586	7,030	With drilling.....	35,012	10,387	3,227
Crude petroleum subindustry.....	8,201	16,402	6,974	Without drilling.....	23,935	5,586	1,709
Alaska.....	26	38	8	Oil and gas well operations, total.....	159,695	82,919	26,673
Crude petroleum subindustry.....	26	38	8	With drilling.....	145,872	78,544	25,402
<u>Type of Operation for the Crude Petroleum and Natural Gas Industry</u>				Without drilling.....	13,823	4,375	1,271
All types of operations, total.....	219,435	99,218	31,727	Gas well operations only, total.....	682	305	114
Producing operations, total.....	219,324	99,197	31,723	With drilling.....	516	143	43
With drilling.....	181,400	89,074	28,672	Without drilling.....	166	162	71
Without drilling.....	37,924	10,123	3,051	Nonproducing operations.....	111	21	4

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour: 1963

(Not applicable for this industry)

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963

Ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
INDUSTRY 1311.—CRUDE PETROLEUM AND NATURAL GAS									
Total.....	14,378	145,244	1,016,431	83,444	166,305	494,910	9,016,372	9,893,763	2,209,930
Less than 0.10.....	2,805	47,110	336,190	34,021	69,244	223,153	6,681,358	7,042,659	1,483,419
0.10 to 0.19.....	2,393	28,965	183,791	21,424	42,544	129,326	1,403,658	1,573,571	336,608
0.20 to 0.29.....	1,125	11,418	63,246	8,951	17,565	45,282	263,840	311,000	68,542
0.30 to 0.39.....	685	7,179	40,137	5,202	10,040	25,404	118,716	147,270	35,849
0.40 to 0.49.....	330	4,875	30,647	3,163	6,206	16,728	69,527	85,377	25,628
0.50 to 0.59.....	436	2,232	11,043	1,626	2,958	6,876	20,127	28,823	8,699
0.60 to 0.69.....	200	1,806	10,142	1,479	2,858	7,864	15,738	23,772	7,431
0.70 to 0.79.....	129	1,526	8,401	1,087	2,198	5,182	11,309	15,575	4,719
0.80 to 0.89.....	99	873	5,713	634	1,258	4,013	6,727	13,216	10,403
0.90 to 0.99.....	33	764	4,358	493	981	2,624	4,657	6,803	1,787
1.00 and over.....	717	5,527	31,839	2,791	5,341	14,117	14,156	26,557	13,285
Undistributed <sup>2</sup> .....	5,426	32,969	290,924	2,573	5,112	14,341	406,559	619,140	213,560
Crude Petroleum Subindustry									
Total.....	12,326	125,842	892,632	71,707	142,847	426,811	7,812,956	8,600,086	1,906,498
Less than 0.10.....	2,329	42,584	306,373	30,713	62,494	202,770	5,929,302	6,265,992	1,310,623
0.10 to 0.19.....	2,178	25,008	155,961	18,686	36,960	111,787	1,198,097	1,348,137	294,345
0.20 to 0.29.....	1,009	8,752	47,687	7,036	13,767	34,993	200,523	239,170	44,724
0.30 to 0.39.....	601	5,665	32,113	4,221	8,228	20,645	96,216	124,540	28,494
0.40 to 0.49.....	293	4,533	28,896	2,947	5,750	15,727	65,582	81,201	24,461
0.50 to 0.59.....	373	1,863	9,173	1,387	2,495	5,628	16,713	25,015	7,535
0.60 to 0.69.....	177	1,384	7,421	1,104	2,100	5,470	11,512	16,750	5,310
0.70 to 0.79.....	107	1,273	6,876	891	1,788	4,083	9,307	12,675	2,486
0.80 to 0.89.....	80	758	5,057	547	1,094	3,516	5,969	11,904	9,881
0.90 to 0.99.....	27	383	2,390	215	441	1,212	2,525	3,607	1,400
1.00 and over.....	571	3,737	21,873	1,837	3,471	8,886	10,545	21,465	7,970
Undistributed <sup>2</sup> .....	4,581	29,902	268,812	2,123	4,259	12,094	266,665	449,630	169,269
Natural Gas Subindustry									
Total.....	2,052	19,402	123,799	11,737	23,458	68,099	1,203,416	1,293,677	303,432
Less than 0.10.....	476	4,526	29,817	3,308	6,750	20,383	752,056	776,667	172,796
0.10 to 0.19.....	215	3,957	27,830	2,738	5,584	17,539	205,561	225,434	42,263
0.20 to 0.29.....	116	2,666	15,559	1,915	3,798	10,289	63,317	71,830	23,818
0.30 to 0.39.....	84	1,514	8,024	981	1,812	4,759	22,500	22,730	7,355
0.40 to 0.49.....	37	342	1,751	216	456	1,001	3,945	4,176	1,167
0.50 to 0.59.....	63	369	1,870	239	463	1,248	3,414	3,808	1,164
0.60 to 0.69.....	23	422	2,721	375	758	2,394	4,226	7,022	2,121
0.70 to 0.79.....	22	253	1,525	196	410	1,099	2,002	2,900	2,233
0.80 to 0.89.....	19	115	656	87	164	497	758	1,312	522
0.90 to 0.99.....	6	381	1,968	278	540	1,412	2,132	3,196	387
1.00 and over.....	146	1,790	9,966	954	1,870	5,231	3,611	5,092	5,315
Undistributed <sup>2</sup> .....	845	3,067	22,112	450	853	2,247	139,894	169,510	44,291

<sup>1</sup>In computing these ratios contract employment serving the establishment is excluded. The cost of contract work in 1963 amounted to 147 percent of payroll for the Crude Petroleum and Natural Gas Industry, to 142 percent for the Crude Petroleum Subindustry, and to 182 percent for the Natural Gas Subindustry.

<sup>2</sup>Represents establishments with zero or negative value added; establishments with no employees; and for number of employees and payroll, includes figures for separately reported central offices and related facilities.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963

Value added per employee <sup>1</sup>	Number of employees	Number of establishments with average employment of--							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1311.—CRUDE PETROLEUM AND NATURAL GAS									
Total.....	145,244	14,378	13,424	570	204	120	41	13	6
Less than \$3,000.....	5,688	1,288	1,249	29	7	1	1	1	-
\$3,000 to \$3,999.....	1,453	345	336	7	-	2	-	-	-
\$4,000 to \$4,999.....	1,116	303	293	9	1	-	-	-	-
\$5,000 to \$5,999.....	1,688	312	301	6	4	1	-	-	-
\$6,000 to \$6,999.....	2,078	263	247	9	4	2	1	-	-
\$7,000 to \$7,999.....	1,558	244	228	13	3	-	-	-	-
\$8,000 to \$8,999.....	1,194	216	207	6	2	1	-	-	-
\$9,000 to \$9,999.....	1,081	185	172	11	2	-	-	-	-
\$10,000 to \$12,499.....	3,566	487	448	30	7	2	-	-	-
\$12,500 to \$14,999.....	4,310	383	352	18	5	5	2	1	-
\$15,000 to \$17,499.....	2,284	344	319	18	5	2	-	-	-
\$17,500 to \$19,999.....	5,327	312	276	26	5	2	1	1	1
\$20,000 and over.....	81,671	4,655	3,981	371	152	100	36	10	5
Negative value added.....	3,257	696	670	17	7	2	-	-	-
No employees.....	-	4,345	4,345	-	-	-	-	-	-
Central offices and related facilities.....	28,973	-	-	-	-	-	-	-	-
Crude Petroleum Subindustry									
Total.....	125,842	12,326	11,537	468	171	96	39	9	6
Less than \$3,000.....	3,878	1,051	1,023	22	5	-	1	-	-
\$3,000 to \$3,999.....	1,125	286	279	6	-	1	-	-	-
\$4,000 to \$4,999.....	950	260	251	8	1	-	-	-	-
\$5,000 to \$5,999.....	1,371	282	273	5	4	-	-	-	-
\$6,000 to \$6,999.....	1,719	225	214	6	2	2	1	-	-
\$7,000 to \$7,999.....	1,231	215	203	11	1	-	-	-	-
\$8,000 to \$8,999.....	1,037	190	183	4	2	1	-	-	-
\$9,000 to \$9,999.....	845	157	148	8	1	-	-	-	-
\$10,000 to \$12,499.....	3,162	433	399	25	7	2	-	-	-
\$12,500 to \$14,999.....	3,002	346	321	16	5	3	1	-	-
\$15,000 to \$17,499.....	1,990	316	297	13	4	2	-	-	-
\$17,500 to \$19,999.....	4,315	284	251	24	5	2	1	-	1
\$20,000 and over.....	71,978	4,035	3,473	307	128	82	35	9	5
Negative value added.....	2,629	608	588	13	6	1	-	-	-
No employees.....	-	3,634	3,634	-	-	-	-	-	-
Central offices and related facilities.....	26,610	-	-	-	-	-	-	-	-
Natural Gas Subindustry									
Total.....	19,402	2,052	1,887	102	33	24	2	4	-
Less than \$3,000.....	1,810	237	226	7	2	1	-	1	-
\$3,000 to \$3,999.....	328	59	57	1	-	1	-	-	-
\$4,000 to \$4,999.....	166	43	42	1	-	-	-	-	-
\$5,000 to \$5,999.....	317	30	28	1	-	1	-	-	-
\$6,000 to \$6,999.....	359	38	33	3	2	-	-	-	-
\$7,000 to \$7,999.....	327	29	25	2	2	-	-	-	-
\$8,000 to \$8,999.....	157	26	24	2	-	-	-	-	-
\$9,000 to \$9,999.....	236	28	24	3	1	-	-	-	-
\$10,000 to \$12,499.....	404	54	49	5	-	-	-	-	-
\$12,500 to \$14,999.....	1,308	37	31	2	-	2	1	1	-
\$15,000 to \$17,499.....	294	28	22	5	1	-	-	-	-
\$17,500 to \$19,999.....	1,012	28	25	2	-	-	-	1	-
\$20,000 and over.....	9,693	616	508	64	24	18	1	1	-
Negative value added.....	628	88	82	4	1	1	-	-	-
No employees.....	-	711	711	-	-	-	-	-	-
Central offices and related facilities.....	2,363	-	-	-	-	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>In computing these ratios contract employment serving the establishment is excluded. The cost of contract work in 1963 amounted to 147 percent of payroll for the Crude Petroleum and Natural Gas Industry, to 142 percent for the Crude Petroleum Subindustry, and to 182 percent for the Natural Gas Subindustry.

TABLE 11. Hourly Earnings of Production, Development, and Exploration Workers for Establishments with 10 or More Employees, by Geographic Areas: 1963

Hourly earnings classes	Number of employees <sup>1</sup>	Number of establishments with 10 or more employees in--									
		United States	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
INDUSTRY 1311.—CRUDE PETROLEUM AND NATURAL GAS											
Total.....	94,597	1,772	-	42	152	183	43	77	1,011	177	87
Less than \$1.49.....	2,580	139	-	1	20	17	8	11	80	1	1
\$1.50 to \$1.99.....	5,543	246	-	8	29	29	14	13	147	6	-
\$2.00 to \$2.49.....	10,708	350	-	14	36	55	6	18	198	20	3
\$2.50 to \$2.99.....	14,097	288	-	10	31	30	9	12	153	28	15
\$3.00 to \$3.49.....	28,711	322	-	6	19	28	3	11	182	47	26
\$3.50 to \$3.99.....	21,426	204	-	1	11	12	1	4	128	33	14
\$4.00 to \$4.49.....	6,729	85	-	1	2	8	-	4	46	17	7
\$4.50 and over.....	3,460	93	-	-	1	2	-	3	53	20	14
No production, development, or exploration workers.....	1,343	45	-	1	3	2	2	1	24	5	7
Crude Petroleum Subindustry											
Total.....	80,160	1,495	-	20	146	170	18	68	856	144	73
Less than \$1.49.....	2,330	122	-	1	20	16	5	8	71	1	-
\$1.50 to \$1.99.....	5,057	222	-	7	28	28	6	13	136	4	-
\$2.00 to \$2.49.....	9,413	311	-	7	35	53	2	17	176	18	3
\$2.50 to \$2.99.....	8,164	221	-	3	28	29	-	9	116	23	13
\$3.00 to \$3.49.....	25,711	264	-	1	18	25	3	10	147	38	22
\$3.50 to \$3.99.....	19,272	177	-	1	11	10	-	4	112	28	11
\$4.00 to \$4.49.....	5,889	63	-	-	2	5	-	4	34	13	5
\$4.50 and over.....	3,133	76	-	-	1	2	-	2	42	16	13
No production, development, or exploration workers.....	1,191	39	-	-	3	2	2	1	22	3	6
Natural Gas Subindustry											
Total.....	14,437	277	-	22	6	13	25	9	155	33	14
Less than \$1.49.....	250	17	-	-	-	1	3	3	9	-	1
\$1.50 to \$1.99.....	486	24	-	1	1	1	8	-	11	2	-
\$2.00 to \$2.49.....	1,295	39	-	7	1	2	4	1	22	2	-
\$2.50 to \$2.99.....	5,933	67	-	7	3	1	9	3	37	5	2
\$3.00 to \$3.49.....	3,000	58	-	5	1	3	-	1	35	9	4
\$3.50 to \$3.99.....	2,154	27	-	-	-	2	1	-	16	5	3
\$4.00 to \$4.49.....	840	22	-	1	-	3	-	-	12	4	2
\$4.50 and over.....	327	17	-	-	-	-	-	1	11	4	1
No production, development, or exploration workers.....	152	6	-	1	-	-	-	-	2	2	1

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
<sup>1</sup>Excludes figures for separately reported central offices and related facilities.

TABLE 12A. Distribution of Operating Companies, by Employment Size and by Number of Establishments: 1963

Establishment counts	Number of--		Number of establishments with average employment of--									
	Operating companies	Employees <sup>1</sup>	Total	0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
Crude Petroleum Subindustry												
Total.....	9,384	99,232	12,326	9,573	1,258	706	468	171	96	39	9	6
Multiunit companies, total.....	1,459	77,992	4,401	2,764	613	397	323	156	94	39	9	6
1 establishment <sup>2</sup> .....	418	4,060	418	244	74	55	30	12	2	1	-	-
2 establishments.....	544	5,873	1,088	741	185	98	53	9	2	-	-	-
3 or 4 establishments.....	307	7,372	1,017	700	143	90	59	17	7	1	-	-
5 or 6 establishments.....	87	4,482	463	325	71	33	23	4	5	1	-	1
7 to 9 establishments.....	42	3,340	333	242	37	25	16	7	1	5	-	-
10 to 14 establishments.....	30	3,577	340	217	40	36	29	12	6	-	-	-
15 to 19 establishments.....	8	2,544	132	67	19	16	20	6	3	-	1	-
20 or more establishments.....	23	46,744	610	228	44	44	93	89	68	31	8	5
Single unit companies.....	7,925	21,240	7,925	6,809	645	309	145	15	2	-	-	-
Natural Gas Subindustry												
Total.....	1,628	17,039	2,052	1,615	160	112	102	33	24	2	4	-
Multiunit companies, total.....	482	14,378	906	578	106	72	89	32	23	2	4	-
1 establishment <sup>2</sup> .....	286	2,135	286	207	32	19	19	4	5	-	-	-
2 establishments.....	104	1,266	208	153	21	18	11	5	-	-	-	-
3 or 4 establishments.....	62	3,349	202	118	26	23	19	8	7	-	1	-
5 or 6 establishments.....	16	3,050	86	39	12	7	15	5	6	1	1	-
7 to 9 establishments.....	10	2,461	76	35	15	4	15	3	2	1	1	-
10 to 14 establishments.....	3	872	32	18	-	-	5	7	2	-	-	-
15 to 19 establishments.....	1	1,245	16	8	-	1	5	-	1	-	1	-
20 or more establishments.....	-	-	-	-	-	-	-	-	-	-	-	-
Single unit companies.....	1,146	2,661	1,146	1,037	54	40	13	1	1	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>Excludes figures for separately reported central offices and related facilities.<sup>2</sup>Represents companies having at least one establishment classified in other industries or subindustries.



**TABLE 12B. Selected Statistics for Operating Companies in the Industry Ranked by Value of Company Shipments and Receipts: 1963 and 1958**

Item	All operating companies	Producing companies ranked by value of shipments and receipts									
		First 8 companies	Next 8	Next 8	Next 8	Next 16	Next 20	Next 32	Next 50	Next 50	Next 50
		1963									
Operating companies.....number..	10,595	8	8	8	8	16	20	32	50	50	50
Establishments.....do.....	14,378	311	230	181	130	194	207	234	257	175	185
Value of shipments and receipts, total.....\$1,000..	9,893,763	4,434,317	1,359,877	767,504	340,061	405,918	281,025	267,883	251,000	171,940	130,260
Crude petroleum, field condensate, and drips.....do.....	7,671,681	3,640,230	1,035,880	584,891	208,405	258,012	205,890	153,876	178,219	121,657	108,037
Natural gas.....do.....	2,160,235	786,464	323,679	176,322	128,966	146,838	73,664	110,729	72,012	46,104	20,008
Other products and receipts for services.....do.....	61,847	7,623	318	6,291	2,690	1,068	1,471	3,278	769	4,179	2,215
Value added in mining.....do.....	9,016,372	4,154,102	1,249,397	678,605	321,980	367,395	290,984	263,759	224,974	173,629	118,495
Persons in industry, total.....number..	159,088	48,443	19,623	10,172	3,883	6,593	5,343	3,577	4,996	3,751	2,247
Production, development, and exploration workers.....do.....	83,444	21,525	8,541	6,616	1,904	3,628	3,434	2,483	2,927	2,483	1,461
All other employees.....do.....	61,800	26,918	11,082	3,556	1,979	2,956	1,365	1,050	1,966	739	701
Proprietors and firm members.....do.....	13,844	-	-	-	-	9	544	44	103	529	85
Man-hours worked by production, develop- ment, and exploration workers, total.....1,000..	166,305	43,297	17,645	13,805	3,661	7,645	7,124	5,199	5,713	4,999	3,150
Operating and maintaining wells.....do....	131,668	35,457	14,770	9,747	3,419	6,279	5,419	3,131	4,637	3,162	2,024
Drilling wells and rig building.....do....	14,881	2,376	939	665	40	249	558	904	321	1,458	741
Exploration work (except drilling).....do....	14,537	4,899	1,676	3,007	199	671	718	399	393	65	202
Other work.....do.....	5,219	565	260	386	3	446	429	765	362	314	183
Principal expenses designated below, total.....\$1,000..	3,682,502	1,626,373	476,744	281,462	85,460	139,943	99,039	99,608	94,275	57,451	43,452
Wages of production, development, and exploration workers.....do....	494,910	159,807	61,080	48,757	10,997	22,310	20,781	15,444	17,511	13,201	7,867
Salaries of all other employees.....do....	521,521	255,195	97,452	32,197	16,987	22,111	9,863	8,319	14,301	5,589	5,325
Supplies, gas purchased for gas lift, and purchases for resale.....do....	1,044,877	466,040	158,027	75,316	27,049	40,904	29,981	34,714	25,172	15,642	13,179
Purchased fuel and purchased electric energy.....do.....	134,659	44,893	16,922	8,583	3,045	4,031	4,562	3,228	3,192	2,360	2,295
Contract work.....do.....	1,486,535	700,438	143,263	116,609	27,382	50,587	33,852	37,903	34,099	20,669	14,786
Purchased machinery installed.....do....	421,250	175,167	55,399	32,543	10,635	19,386	15,735	10,788	11,061	5,808	4,281
Capital expenditures, total.....do.....	2,209,930	1,106,323	263,131	144,152	50,030	76,385	94,089	82,509	47,498	46,158	22,776
Development and exploration of mineral properties.....do....	1,329,563	729,948	160,269	82,179	30,010	41,993	31,671	46,380	25,791	24,381	13,498
Other construction.....do.....	235,420	129,440	18,486	10,601	5,568	13,619	4,078	10,631	3,660	6,875	1,007
New machinery and equipment.....do....	546,228	228,248	83,831	47,352	14,044	19,796	15,208	16,965	15,763	11,931	7,501
Used plant and equipment.....do.....	98,719	18,687	545	4,020	408	977	43,132	8,533	2,284	2,971	770
Wells drilled and completed, except those drilled on contract for others:											
All wells, total:											
Drilled.....number..	39,886	7,697	2,168	1,143	709	802	1,348	891	880	1,047	861
Footage drilled.....1,000 ft..	171,943	47,687	11,359	6,454	3,594	5,125	4,784	5,747	4,982	4,791	3,449
Cost of drilling and equipping.....\$1,000..	2,050,762	872,154	189,560	133,959	49,650	75,857	58,887	78,334	50,281	41,901	28,606
Oil wells:											
Drilled.....number..	19,016	4,897	1,101	580	296	360	748	291	370	430	319
Footage drilled.....1,000 ft..	77,782	28,312	5,121	2,781	1,405	2,185	2,018	1,886	1,892	1,876	1,165
Cost of drilling and equipping.....\$1,000..	1,028,322	513,930	79,240	54,118	18,575	29,295	26,115	27,684	19,620	17,477	11,681
Gas wells:											
Drilled.....number..	4,388	716	275	172	97	257	210	261	116	186	123
Footage drilled.....1,000 ft..	24,394	5,861	2,204	1,304	720	1,523	1,057	1,430	844	1,016	653
Cost of drilling and equipping.....\$1,000..	408,157	135,834	51,699	39,045	11,482	29,473	15,715	22,406	12,699	14,025	8,131
Dry holes:											
Drilled.....number..	13,902	1,671	509	301	202	159	237	318	313	362	328
Footage drilled.....1,000 ft..	65,073	12,487	3,439	2,159	1,275	1,302	1,432	2,385	2,051	1,809	1,528
Cost of drilling and equipping.....\$1,000..	580,177	211,586	52,694	36,579	18,236	15,561	15,192	27,845	16,717	9,925	8,423
Service wells:											
Drilled.....number..	2,580	413	283	90	114	26	153	21	81	69	91
Footage drilled.....1,000 ft..	4,694	1,027	595	210	194	115	277	46	195	90	103
Cost of drilling and equipping.....\$1,000..	34,106	10,804	5,927	2,217	1,357	1,528	1,865	399	1,245	474	371

See footnotes at end of table.

**TABLE 12B. Selected Statistics for Operating Companies in the Industry Ranked by Value of Company Shipments and Receipts: 1963 and 1958—Continued**

Item	Producing companies ranked by value of shipments and receipts—Continued											Non-producing companies
	Next 50	Next 50	Next 50	Next 50	Next 50	Next 300	Next 600	Next 1,000	Next 1,000	Next 1,000	All other producing companies	
	1963											
Operating companies.....number..	50	50	50	50	50	300	600	1,000	1,000	1,000	5,299	896
Establishments.....do....	151	174	106	141	113	621	994	1,299	1,162	1,114	5,477	922
Value of shipments and receipts, total.....\$1,000..	104,227	85,745	75,417	67,070	57,708	261,270	271,215	248,880	146,362	92,813	73,271	-
Crude petroleum, field condensate, and drips.....do....	82,534	63,888	60,218	52,358	43,611	198,252	194,004	204,897	132,353	81,701	62,768	-
Natural gas.....do....	19,213	19,569	13,544	13,047	11,816	58,417	71,180	40,173	11,522	9,332	7,636	-
Other products and receipts for services.....do....	2,480	2,288	1,655	1,665	2,281	4,601	6,031	3,810	2,487	1,780	2,867	-
Value added in mining.....do....	85,525	78,136	63,338	55,784	49,889	227,791	236,597	201,109	113,211	43,645	39,093	( <sup>1</sup> )
Persons in industry, total.....number..	1,779	2,164	1,079	1,518	1,141	5,403	6,622	6,838	4,558	4,412	13,294	1,652
Production, development, and exploration workers.....do....	1,229	1,144	719	791	794	3,927	4,226	4,163	2,478	2,416	6,100	455
All other employees.....do....	421	796	300	606	258	1,046	1,427	1,276	819	1,125	808	606
Proprietors and firm members.....do....	129	224	60	121	89	430	969	1,399	1,261	871	6,386	591
Man-hours worked by production, development, and exploration workers, total.....1,000..	2,432	2,442	1,391	1,674	1,516	7,871	7,880	7,768	4,639	4,326	11,274	854
Operating and maintaining wells.....do....	2,061	1,833	1,154	1,297	978	6,245	6,086	6,139	3,600	3,581	10,620	29
Drilling wells and rig building.....do....	254	391	163	227	406	1,025	1,064	1,081	705	479	466	369
Exploration work (except drilling).....do....	81	144	52	91	79	268	423	297	162	163	97	451
Other work.....do....	36	74	22	59	53	333	307	251	172	103	91	5
Principal expenses designated below, total.....\$1,000..	39,354	30,706	25,953	27,563	19,134	90,265	97,824	113,082	60,544	76,374	67,858	30,038
Wages of production, development, and exploration workers.....do....	6,783	5,790	4,076	4,264	3,481	19,640	18,320	17,706	10,023	9,302	15,928	1,842
Salaries of all other employees.....do....	3,289	6,055	1,993	4,498	2,099	6,770	8,331	7,349	4,262	4,493	2,820	2,223
Supplies, gas purchased for gas lift, and purchases for resale.....do....	11,445	7,337	6,783	6,852	3,242	26,126	23,601	25,268	13,109	12,423	19,278	3,389
Purchased fuel and purchased electric energy.....do....	1,878	1,607	1,317	1,547	1,086	5,291	6,985	6,239	4,821	2,926	6,508	1,343
Contract work.....do....	15,959	9,917	11,784	10,402	9,226	32,438	40,587	56,520	28,329	47,230	23,324	21,241
Purchased machinery installed.....do....	4,252	2,352	2,214	3,783	2,837	10,691	11,876	14,771	7,600	7,114	10,930	2,027
Capital expenditures, total.....do....	14,832	13,604	10,019	11,298	8,572	41,067	48,431	55,027	20,708	20,525	25,862	6,934
Development and exploration of mineral properties.....do....	8,229	8,064	6,428	5,923	4,017	21,752	24,022	32,529	9,311	8,187	9,816	5,165
Other construction.....do....	1,551	501	401	284	1,039	2,547	8,239	6,658	2,426	4,228	3,142	459
New machinery and equipment.....do....	4,571	4,041	3,019	4,060	2,825	12,509	14,136	13,931	6,927	7,141	11,345	1,084
Used plant and equipment.....do....	481	998	171	1,031	691	4,259	2,034	1,929	2,044	969	1,559	226
Wells drilled and completed, except those drilled on contract for others:												
All wells, total:												
Drilled.....number..	594	553	743	534	358	2,469	2,788	3,975	2,389	1,784	4,714	1,439
Footage drilled.....1,000 ft..	2,817	2,119	2,652	2,431	1,711	8,498	10,417	13,938	8,139	5,258	11,023	4,968
Cost of drilling and equipping.....\$1,000..	25,351	17,236	19,402	19,414	13,909	65,458	70,618	85,801	47,359	33,288	47,262	26,475
Oil wells:												
Drilled.....number..	256	225	337	244	203	960	1,208	1,763	926	883	2,282	337
Footage drilled.....1,000 ft..	1,341	771	1,039	1,064	939	3,202	4,158	5,945	2,588	2,408	4,675	1,011
Cost of drilling and equipping.....\$1,000..	15,260	7,199	8,746	10,757	8,538	30,768	34,976	43,197	19,316	18,176	27,892	5,762
Gas wells:												
Drilled.....number..	86	76	50	27	19	245	230	439	159	122	352	170
Footage drilled.....1,000 ft..	379	408	247	175	104	1,165	1,226	1,513	598	452	908	607
Cost of drilling and equipping.....\$1,000..	3,545	4,850	2,718	1,945	1,119	11,212	13,958	11,368	4,850	3,676	2,876	5,531
Dry holes:												
Drilled.....number..	229	217	305	244	128	1,106	1,158	1,624	1,134	682	1,756	919
Footage drilled.....1,000 ft..	1,041	905	1,300	1,157	638	3,952	4,751	6,215	4,655	2,235	5,014	3,343
Cost of drilling and equipping.....\$1,000..	6,161	4,954	7,548	6,470	4,054	22,613	20,100	29,957	22,271	10,119	16,021	15,151
Service wells:												
Drilled.....number..	23	35	51	19	8	158	192	149	170	97	324	13
Footage drilled.....1,000 ft..	56	35	66	35	30	179	282	265	298	163	426	7
Cost of drilling and equipping.....\$1,000..	385	233	390	242	198	865	1,584	1,279	922	1,317	473	31

See footnotes at end of table.

TABLE 12B. **Selected Statistics for Operating Companies in the Industry Ranked by Value of Company Shipments and Receipts: 1963 and 1958—Continued**

Item	All operating companies	Producing companies ranked by value of shipments and receipts									
		First 8 companies	Next 8	Next 8	Next 8	Next 16	Next 20	Next 32	Next 50	Next 50	Next 50
		1958 <sup>2</sup>									
Operating companies.....number..	9,835	8	8	8	8	16	20	32	50	50	50
Establishments <sup>3</sup> .....do....	11,993	193	122	102	92	103	115	136	163	154	118
Value of shipments and receipts, total.....\$1,000..	8,385,906	3,419,131	1,254,901	703,570	271,181	353,703	271,243	258,859	246,058	164,771	124,678
Crude petroleum, field condensate, and drips.....do....	7,038,575	2,967,928	1,064,610	588,036	230,737	257,587	155,279	196,798	195,737	133,072	105,823
Natural gas.....do....	1,286,454	449,345	189,845	115,381	36,980	93,142	115,631	55,018	46,672	29,973	16,746
Other products and receipts for services.....do....	60,877	1,858	446	153	3,464	2,974	333	7,043	3,649	1,726	2,109
Value added in mining.....do....	7,339,922	3,168,967	1,145,333	657,271	240,225	324,688	241,327	206,412	205,242	138,288	97,654
Persons in industry, total.....number..	194,321	58,024	21,199	14,930	5,452	8,175	6,467	5,684	4,921	3,946	2,849
Production, development, and exploration workers.....do....	102,445	27,464	8,965	7,100	2,066	4,321	3,797	3,667	2,744	2,472	1,893
All other employees.....do....	77,595	30,560	12,234	7,830	3,374	3,852	2,670	1,985	2,125	1,437	929
Proprietors and firm members.....do....	14,281	-	-	-	12	2	-	32	52	37	27
Man-hours worked by production, develop- ment, and exploration workers, total....1,000..	200,930	54,846	18,158	14,947	4,403	8,932	7,946	7,654	6,075	5,233	4,188
Operating and maintaining wells.....do....	158,637	40,115	15,063	13,325	4,083	7,450	6,615	5,250	4,635	4,153	3,337
Drilling wells and rig building.....do....	25,188	6,129	213	1,348	165	825	606	1,409	1,146	871	803
Exploration work (except drilling).....do....	11,171	6,445	2,505	201	146	392	303	103	125	76	22
Other work.....do....	5,934	2,157	377	73	9	265	422	892	169	133	26
Principal expenses designated below, total.....\$1,000..	3,545,642	1,296,764	439,156	233,806	116,633	195,032	128,657	130,888	113,381	79,729	62,449
Wages of production, development, and exploration workers.....do....	497,571	168,077	50,510	40,689	11,666	22,365	19,214	17,810	13,466	11,750	9,383
Salaries of all other employees.....do....	544,615	224,068	85,997	55,523	26,850	26,179	17,229	14,221	14,975	10,592	6,611
Supplies and gas purchased for gas lift.....do....	951,911	320,192	119,494	58,379	29,478	70,535	35,631	44,098	29,778	24,015	18,933
Purchased fuel and purchased electric energy.....do....	101,974	26,593	10,983	5,699	2,868	2,641	2,653	3,432	2,975	2,251	2,036
Contract work.....do....	1,449,571	557,834	172,172	73,516	45,771	73,312	53,930	51,327	52,187	31,121	25,486
Purchased machinery installed.....do....	486,021	165,941	52,847	44,111	16,783	16,745	12,885	20,622	17,593	11,060	9,166
Capital expenditures, total.....do....	1,943,493	820,396	245,928	135,406	63,944	134,218	75,183	67,032	61,717	41,964	28,597
Development and exploration of mineral properties.....do....	1,062,206	466,940	139,992	77,325	36,967	75,368	45,964	34,722	37,126	26,051	14,741
Other construction.....do....	197,674	93,732	18,817	6,387	3,634	36,378	5,089	4,256	1,266	907	587
New machinery and equipment.....do....	646,389	252,930	82,420	51,645	20,388	21,421	23,266	25,304	20,972	14,215	12,757
Used plant and equipment.....do....	37,224	6,794	4,699	49	2,955	1,051	864	2,750	2,353	791	512
Wells drilled and completed, except those drilled on contract for others:											
All wells, total:											
Drilled.....number..	44,687	6,418	2,200	1,568	593	1,439	1,126	1,603	1,249	1,131	824
Footage drilled.....1,000 ft..	185,988	42,202	12,751	7,203	3,469	6,621	5,362	8,049	6,334	4,285	3,432
Cost of drilling and equipping.....\$1,000..	2,371,459	798,256	229,213	124,997	58,265	98,316	77,167	84,518	71,635	50,841	36,061
Oil wells:											
Drilled.....number..	22,940	4,231	1,289	723	339	381	456	752	639	599	440
Footage drilled.....1,000 ft..	90,437	27,030	6,949	3,506	1,779	1,803	1,793	3,735	3,048	1,927	1,726
Cost of drilling and equipping.....\$1,000..	1,291,379	487,602	129,632	59,873	29,037	27,502	23,655	46,992	37,323	26,919	19,920
Gas wells:											
Drilled.....number..	4,426	678	227	220	37	658	389	237	100	116	77
Footage drilled.....1,000 ft..	24,166	5,348	1,826	1,351	296	2,777	2,053	1,320	799	663	374
Cost of drilling and equipping.....\$1,000..	434,889	137,864	41,702	35,978	9,933	43,766	35,614	15,282	14,089	10,828	4,576
Dry holes:											
Drilled.....number..	14,998	1,213	527	346	188	287	236	511	441	344	243
Footage drilled.....1,000 ft..	67,843	9,178	3,686	1,948	1,298	1,823	1,433	2,876	2,407	1,602	1,253
Cost of drilling and equipping.....\$1,000..	621,091	167,585	55,331	25,929	18,240	24,546	17,586	21,230	19,540	12,548	11,093
Service wells:											
Drilled.....number..	2,323	296	157	279	29	113	45	103	69	72	64
Footage drilled.....1,000 ft..	3,542	646	290	398	96	218	83	118	80	93	79
Cost of drilling and equipping.....\$1,000..	24,100	5,205	2,548	3,217	1,055	2,502	312	1,014	683	546	472

See footnotes at end of table.

TABLE 12B. Selected Statistics for Operating Companies in the Industry Ranked by Value of Company Shipments and Receipts: 1963 and 1958—Continued

Item	Producing companies ranked by value of shipments and receipts—Continued											Non-producing companies
	Next 50	Next 50	Next 50	Next 50	Next 50	Next 300	Next 600	Next 1,000	Next 1,000	Next 1,000	All other producing companies	
	1958 <sup>2</sup>											
Operating companies.....number..	50	50	50	50	50	300	600	1,000	1,000	1,000	4,972	463
Establishments.....do.....	127	99	98	83	90	426	819	1,188	1,120	1,083	5,085	477
Value of shipments and receipts, total.....\$1,000..	101,012	86,192	72,199	63,120	54,465	242,914	269,995	212,850	100,993	53,580	60,491	-
Crude petroleum, field condensate, and drips.....do.....	88,796	68,407	60,072	52,426	45,241	207,913	237,808	189,658	91,233	48,066	53,348	-
Natural gas.....do.....	8,877	14,147	10,822	9,066	7,875	26,659	27,357	16,723	7,176	4,269	4,750	-
Other products and receipts for services.....do.....	3,339	3,638	1,305	1,628	1,349	8,342	4,830	6,469	2,584	1,245	2,393	-
Value added in mining.....do.....	75,129	66,692	52,209	47,713	40,755	175,019	193,177	151,783	61,694	31,021	32,258	( <sup>1</sup> )
Persons in industry, total.....number..	2,955	1,843	1,852	1,661	1,555	6,969	9,026	9,372	6,011	4,964	15,137	1,329
Production, development, and exploration workers.....do.....	1,994	1,311	1,229	1,123	1,040	4,738	6,241	6,417	3,853	2,684	6,865	461
All other employees.....do.....	905	473	565	491	459	1,870	1,977	1,644	913	541	629	132
Proprietors and firm members.....do.....	56	59	58	47	56	361	808	1,311	1,245	1,739	7,634	736
Man-hours worked by production, development, and exploration workers, total.....1,000..	3,877	2,811	2,644	2,538	2,029	9,857	11,744	11,591	6,774	4,496	9,381	806
Operating and maintaining wells.....do.....	2,942	2,293	1,954	1,927	1,588	7,257	9,290	9,290	5,321	4,022	8,660	677
Drilling wells and rig building.....do.....	852	466	555	563	376	2,378	2,037	1,984	1,199	428	305	530
Exploration work (except drilling).....do.....	57	3	51	3	38	85	36	47	24	3	345	161
Other work.....do.....	26	49	84	45	27	137	381	270	230	43	71	48
Principal expenses designated below, total.....\$1,000..	53,663	42,306	34,979	30,036	28,657	125,266	138,543	114,232	67,386	39,364	54,919	19,796
Wages of production, development, and exploration workers.....do.....	7,788	6,049	5,360	5,328	4,180	19,731	23,266	22,418	13,171	8,615	14,826	1,909
Salaries of all other employees.....do.....	6,156	3,354	3,625	3,387	3,052	12,447	12,235	8,866	4,434	2,153	1,838	823
Supplies and gas purchased for gas lift.....do.....	15,759	12,119	12,055	9,392	7,725	33,656	37,954	30,586	19,328	9,447	10,249	3,108
Purchased fuel and purchased electric energy.....do.....	2,308	1,628	1,401	1,051	1,046	4,904	6,274	6,772	4,705	3,242	5,292	1,220
Contract work.....do.....	21,652	19,156	12,538	10,878	12,654	54,528	58,814	45,590	25,748	15,907	22,714	12,736
Purchased machinery installed.....do.....	7,904	8,785	4,989	4,853	4,165	22,861	25,830	19,859	8,744	5,655	3,321	1,302
Capital expenditures, total.....do.....	21,740	22,188	10,993	10,767	11,880	48,054	52,054	41,740	19,226	11,692	13,343	5,431
Development and exploration of mineral properties.....do.....	8,549	7,504	4,478	4,706	5,773	20,827	22,167	17,390	6,432	3,117	2,978	3,089
Other construction.....do.....	896	5,657	329	337	191	884	1,772	2,714	3,805	3,102	6,050	884
New machinery and equipment.....do.....	9,378	8,560	5,716	5,381	5,648	24,748	24,142	19,167	7,675	5,079	4,138	1,439
Used plant and equipment.....do.....	2,917	467	470	343	268	1,595	3,973	2,469	1,314	394	177	19
Wells drilled and completed, except those drilled on contract for others:												
All wells, total:												
Drilled.....number..	1,157	706	963	690	737	2,953	3,638	4,509	2,879	2,302	5,224	778
Footage drilled.....1,000 ft..	4,230	2,811	2,935	2,563	3,141	11,164	12,195	14,344	8,599	6,195	15,562	2,541
Cost of drilling and equipping.....\$1,000..	35,548	25,916	23,161	16,684	26,937	90,436	92,546	133,759	79,613	58,375	143,033	16,280
Oil wells:												
Drilled.....number..	648	359	423	335	336	1,346	1,934	2,470	1,635	1,133	2,287	185
Footage drilled.....1,000 ft..	2,247	1,249	1,251	1,186	1,222	4,895	6,064	6,392	4,305	2,544	5,415	371
Cost of drilling and equipping.....\$1,000..	23,341	12,763	13,021	9,931	11,249	51,397	56,719	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	3,447
Gas wells:												
Drilled.....number..	85	91	68	32	63	163	324	236	153	132	384	46
Footage drilled.....1,000 ft..	388	577	240	165	561	808	1,124	1,067	570	436	1,265	158
Cost of drilling and equipping.....\$1,000..	3,734	7,811	2,567	2,135	10,576	10,526	12,216	11,023	5,581	4,142	13,069	1,877
Dry holes:												
Drilled.....number..	357	216	309	251	302	1,286	1,290	1,646	1,011	968	2,518	508
Footage drilled.....1,000 ft..	1,483	932	1,240	1,108	1,333	5,197	4,800	6,658	3,618	3,120	8,853	1,997
Cost of drilling and equipping.....\$1,000..	7,555	5,076	6,700	4,226	4,963	27,046	22,610	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	10,917
Service wells:												
Drilled.....number..	67	40	163	72	36	158	180	157	80	69	35	39
Footage drilled.....1,000 ft..	112	53	204	104	25	264	207	227	106	95	29	15
Cost of drilling and equipping.....\$1,000..	818	266	873	392	149	1,467	1,001	782	346	318	95	39

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
<sup>1</sup>Not shown since the cost of supplies, gas purchased for gas lift and repressuring, purchased fuel and electric energy, contract work, and purchased machinery installed exceeded capital expenditures.  
<sup>2</sup>Excludes data for Alaska.  
<sup>3</sup>Figures for number of establishments in 1958 are not entirely comparable with those for 1963. For 1963, companies made separate establishment reports by districts for Louisiana, Texas, and New Mexico, whereas for 1958 each report (establishment) represented all operations in an entire State.

U.S. DEPARTMENT OF COMMERCE  
BUREAU OF THE CENSUS

## NATURAL GAS LIQUIDS

### INDUSTRY DESCRIPTION

This report shows 1963 Census of Mineral Industries statistics for establishments classified in industry 1321, Natural Gas Liquids. This industry represents establishments primarily engaged in producing liquid hydrocarbons from oil and gas field gases. Establishments recovering liquefied petroleum gases incident to petroleum refining or to the manufacturing of chemicals are classified in Major Groups 28 or 29.

Figures are also shown in tables 1, 2, 3B, and 4 of this report for the three subindustries, Natural Gasoline, Cycle Condensate, and Fractionating. The Natural Gasoline Subindustry represents establishments primarily engaged in producing natural gasoline and liquefied petroleum gases from natural gas. The Cycle Condensate Subindustry represents establishments primarily engaged in producing cycle condensate and derived liquids at establishments cycling the natural gas back into the ground. The Fractionating Subindustry represents establishments engaged principally in fractionating natural gas liquids received from other establishments. For census purposes, distinction between the three subindustries was based on the respondent's reply to a check-box inquiry asking for type of plant as either "natural gasoline plant," "cycle condensate plant," or "fractionating plant." In general, plants were excluded from the Natural Gas Liquids Industry if the ratio of barrels of natural gas liquids recovered to million cubic feet of gas processed was less than 6.

This report does not include the recovery of natural gas liquids as a secondary activity in dehydration, pressure maintenance, and boosting plants. Insofar as such operations are associated with natural gas transmissions lines, they are not within the scope of the 1963 economic censuses (manufactures, mineral industries, and business). Also, no separate figures were obtained for 1963 on the production of field condensate and drips from wellhead fittings in the oil and gas fields. This operation is included with crude petroleum in the 1963 Census of Mineral Industries report, "Crude Petroleum and Natural Gas." Separate figures were requested for this item for 1958 and the quantity of 48,647 thousand barrels for field condensate and drips was reported. But it was found that many companies do not keep separate records for this item and, therefore, the figures tabulated were of very limited significance. Also excluded from this report is the production of liquefied gases from petroleum refinery gases. Such production is included in the 1963 Census of Manufactures report, "Petroleum Refining and Related Industries." In 1963, the net shipments of liquefied petroleum gases by manufacturing industries was 178 million barrels as compared with net shipments of natural gas liquids by the natural gas liquids industry of 398 million barrels.

For the subindustries Natural Gasoline and Cycle Condensate, statistics are shown in tables 2 and 3B for establishments classified by method of recovery of natural gas liquids, separate figures being shown where possible for the methods of recovery: "absorption," "compression," "refrigeration," "charcoal and other," and "combination." These classifications were also based on a check-box inquiry in the report form.

## SUMMARY OF FINDINGS

The total value of shipments and receipts of the Natural Gas Liquids Industry amounted to \$2,801 million. Of this total, the value of shipments of natural gas liquids amounted to \$913 million, the value of residue gas shipped to \$1,878 million, and the value of secondary products and services to \$10 million. The Natural Gasoline Subindustry accounted for \$2,394 million of the total value of shipments and receipts, the Cycle Condensate Subindustry for \$331 million, and the Fractionating Subindustry for \$75 million.

Net shipments of natural gas liquids are shown in several places in this report. The value of net shipments, amounting to \$799 million, was obtained by subtracting the value of natural gas liquids and crude petroleum received for processing (\$114 million) from the value of gross shipments of natural gas liquids (\$913 million). Similarly, quantity of net liquids production and net liquids shipments was obtained by subtraction of quantity receipts of liquids from the gross quantity of production or shipments. These net figures avoid the duplication in gross production and shipments figures resulting from transfers of liquids from other plants in the same industry to associated plants or to a central fractionator and from some receipts of crude petroleum for processing.

The production index for the primary products of the industry increased to 164 in 1963 from the 1958 level of 115. The unit value index for 1963 was 122 compared to 107 in 1958. Both indexes were computed on a basis of 1954 = 100.

The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the production of secondary products, and in the performance of contract work for others. This fact should be taken into account in comparing industry and subindustry statistics (tables 1 to 4 and 7 to 12) with product statistics (table 6) showing shipments by all industries and subindustries of the primary products of the specified industry. The extent of the "product mix" is indicated in tables 3A, 3B, and 5 which show the value of primary and secondary products shipped by establishments classified in the specified industry and also the value of net shipments of natural gas liquids.

## COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the Natural Gas Liquids Industry are, in general, comparable with product statistics for the same commodities published by the Bureau of Mines. The differences which occur result primarily from differences in data collection methods, coverage, and objectives sought. The most nearly comparable statistics from the two bureaus are shown in the table below. Major reasons for the differences in product statistics are as follows:

1. The Bureau of Mines includes statistics for some liquids recovered incident to the operation of gathering and transmission lines. Such liquids are not classified as natural gas liquids in Census Bureau reports.
2. Although a separate report was requested by the Census Bureau for each natural gas liquids plant, in reporting unitized operations some flexibility was permitted. If it was particularly difficult for the operator to prepare separate reports for each plant, a consolidated report was accepted, provided it did not include operations in more than one county. The acceptance of such consolidated reports explains some of the differences between the counts of number of establishments as shown in Census and Mines reports.
3. The Bureau of the Census excludes small establishments for which the value of products and reported costs were below \$500. The Bureau of Mines includes all reports regardless of size.

## 1963 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Unit of measure	Bureau of the Census statistics			Bureau of Mines statistics		
		Production (quantity)	Shipments (including inter-plant transfers) or receipts		Production (quantity)	Shipments or receipts	
			Quantity	Value (\$1,000)		Quantity	Value (\$1,000)
Net natural gas liquids production and shipments.....	1,000 barrels	398,892	398,272	798,852	400,886	398,363	<sup>1</sup> 798,943
Natural gas received for processing.....	Million cu.ft..	(X)	12,657,364	1,841,309	(X)	12,430,353	(NA)
Residue gas:							
Shipped.....	...do..	(X)	11,531,012	1,877,679	(X)	<sup>2</sup> 11,248,544	(NA)
Used for fuel at plant.....	...do..	479,747	(X)	(X)	473,592	(X)	(X)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

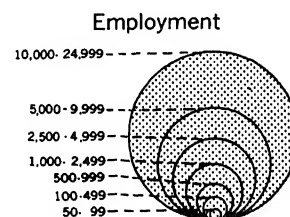
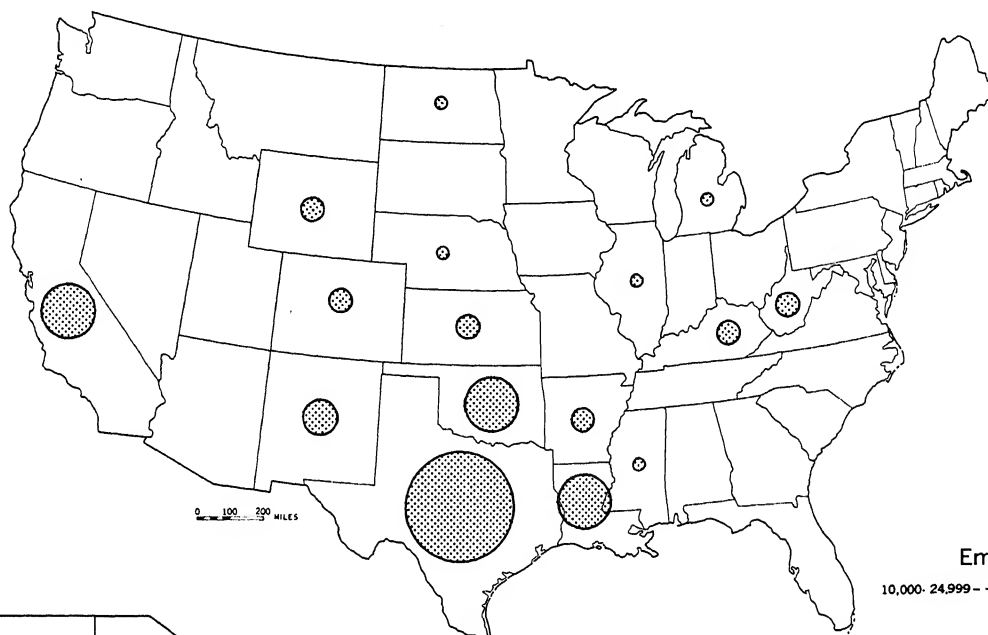
<sup>1</sup>Represents value of production.

<sup>2</sup>Represents "returned to formation," "pipeline returned to producer," and "pipeline to other companies."

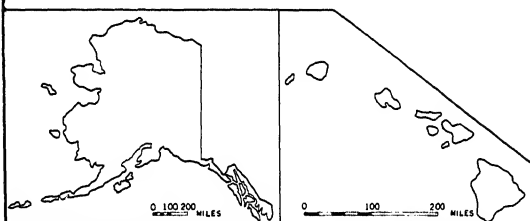


# NATURAL GAS LIQUIDS

Distribution of Employment by State: 1963



No circle is shown for States with fewer than 50 employees.



## Employment and Production: 1840 - 1963

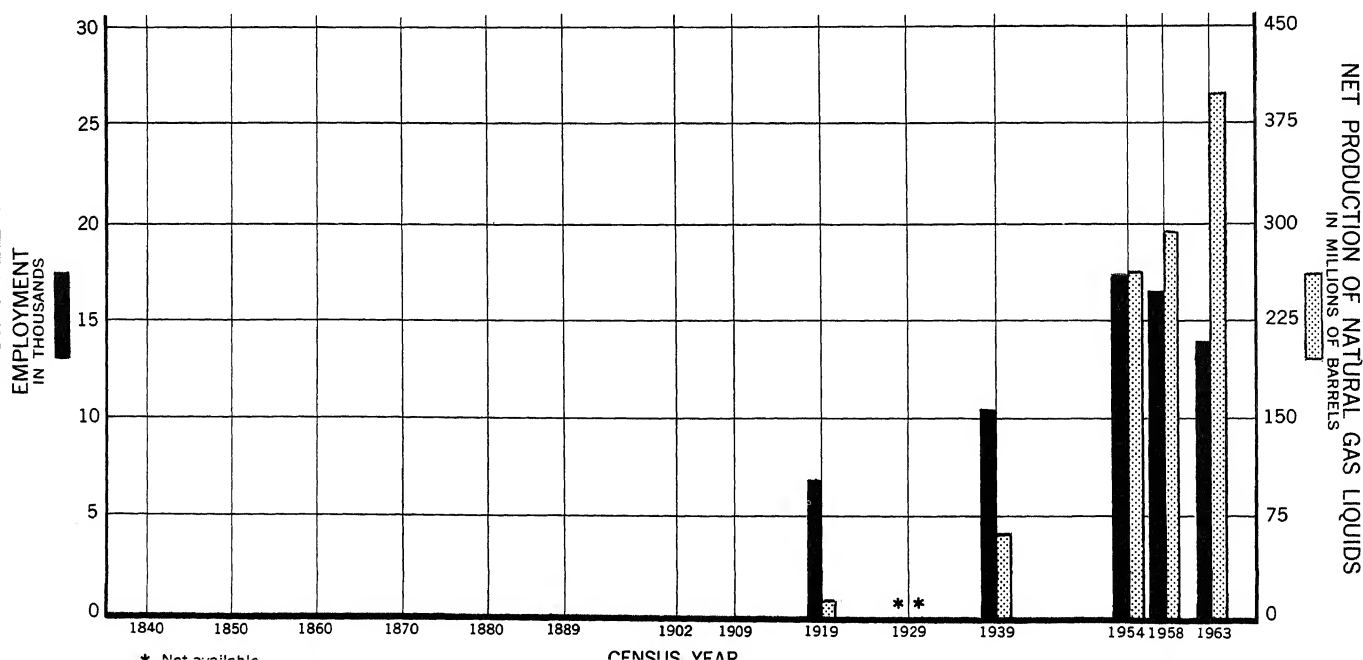


TABLE 1. General Statistics: 1963 and Earlier Years

Industry code, industry, and year	Operating companies  (number)	Establishments		All employees		Production and related workers			Value added in mining  (\$1,000)	
		Total  (number)	With 20 employees or more  (number)	Total  (number)	Payroll  (\$1,000)	Total  (number)	Man-hours  (1,000)	Wages  (\$1,000)		
1321.—NATURAL GAS LIQUIDS										
1963, total.....	164	652	245	13,859	96,553	11,939	24,455	80,745	762,070	
<u>Subindustry</u>										
Natural gasoline.....	147	595	212	11,953	82,733	10,282	20,909	69,172	631,757	
Cycle condensate.....	34	48	25	1,646	11,943	1,432	3,056	10,041	120,318	
Fractionating <sup>1</sup> .....	8	9	8	260	1,877	224	490	1,532	9,995	
1958, total.....	176	593	290	16,514	96,319	13,445	26,947	75,739	587,580	
<u>Subindustry</u>										
Natural gasoline.....	163	547	254	14,360	83,259	11,758	23,537	65,793	508,553	
Cycle condensate.....	31	46	36	2,154	13,060	1,687	3,410	9,946	79,027	
1954, total.....	181	562	287	17,340	85,057	13,560	27,862	63,983	(NA)	
<u>Subindustry</u>										
Natural gasoline.....	167	521	(NA)	15,045	73,359	11,740	24,119	55,114	(NA)	
Cycle condensate.....	30	41	(NA)	2,295	11,698	1,820	3,743	8,869	(NA)	
1939.....	295	<sup>2</sup> 736	(NA)	10,337	18,264	8,332	16,634	13,212	(NA)	
Selected expenses										
		Supplies, purchased fuels and electricity, and contract work  (\$1,000)	Natural gas received for processing  (\$1,000)	Natural gas liquids and crude petroleum received for processing  (\$1,000)	Purchased machinery installed  (\$1,000)	Value of shipments and receipts  (\$1,000)	Value of net shipments and receipts  (\$1,000)	Quantity of net production of natural gas liquids <sup>4</sup>  (1,000 barrels)	Capital expenditures  (\$1,000)	Horsepower rating of power equipment  (1,000 hp.)
1321.—NATURAL GAS LIQUIDS										
1963, total.....	157,567	1,841,309	114,644	39,068	2,800,802	808,479	398,892	113,856	3,887	
<u>Subindustry</u>										
Natural gasoline.....	134,587	(D)	(D)	33,734	2,394,427	(D)	342,394	101,846	3,446	
Cycle condensate.....	19,102	190,765	5,529	4,872	331,385	128,274	53,971	9,201	414	
Fractionating <sup>1</sup> .....	3,878	(D)	(D)	462	74,990	(D)	( <sup>5</sup> )	2,809	27	
1958, total.....	100,226	850,356	142,030	39,836	1,625,098	706,915	294,192	94,930	(NA)	
<u>Subindustry</u>										
Natural gasoline.....	91,039	736,042	130,894	37,297	1,418,295	585,764	251,433	85,530	(NA)	
Cycle condensate.....	9,187	114,314	11,136	2,539	206,803	121,151	42,759	9,400	(NA)	
1954, total.....	85,771	(NA)	57,556	65,752	(NA)	582,866	255,450	109,959	2,902	
<u>Subindustry</u>										
Natural gasoline.....	77,091	(NA)	57,556	60,913	(NA)	450,099	207,370	102,277	2,536	
Cycle condensate.....	8,680	(NA)	-	4,839	(NA)	132,767	48,080	7,682	366	
1939.....	19,592	(NA)	(NA)	(NA)	(NA)	96,338	60,825	(NA)	772	

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>The smaller number of such plants in 1958 and 1954 were probably included with natural gasoline plants. No separate figures were collected for fractionating plants for previous years.<sup>2</sup>Represents number of plants.<sup>3</sup>Represents value of gross shipments and receipts less value of residue gas shipped and less cost of natural gas liquids and crude petroleum received for processing.<sup>4</sup>Represents gross production less natural gas liquids received for processing.<sup>5</sup>Not shown since the difference between production and liquids received for such plants primarily reflects changes in finished products and materials

TABLE 2. General Statistics, by Geographic Areas and Type of Operation: 1963 and 1958

Industry code, industry, geographic area, and type of operation <sup>1</sup>	1963												1958		
	Establishments		All employees		Production and related workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Value of net shipments and receipts <sup>2</sup>	Quantity of net shipments of natural gas liquids <sup>3</sup>	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages								
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 barrels)	(\$1,000)	(number)	(\$1,000)
1321.—NATURAL GAS LIQUIDS, TOTAL.....	652	245	13,859	96,553	11,939	24,455	80,745	762,070	2,152,588	2,800,802	808,479	398,272	113,856	16,514	587,580
<u>Geographic Area</u>															
Northeast and North Central.....	42	10	609	4,058	530	1,138	3,446	35,825	227,607	242,038	52,805	26,582	21,394	660	31,060
Nebraska.....	6	-	63	443	57	129	395	1,469	(D)	4,340	2,081	929	(D)	(NA)	(NA)
Kansas.....	19	6	303	1,895	272	589	1,645	16,500	119,910	120,100	24,123	13,061	16,410	328	11,788
South Atlantic.....	26	6	305	1,943	278	561	1,731	13,144	107,196	119,250	18,887	9,675	1,090	343	8,501
East South Central, total.....	11	5	230	1,605	193	388	1,261	14,050	64,551	77,806	12,740	5,931	795	230	9,011
Kentucky.....	5	3	144	957	118	238	755	9,668	45,062	54,586	9,654	4,692	144	173	8,023
Mississippi.....	6	2	86	648	75	150	506	4,382	19,489	23,220	3,086	1,239	651	57	988
West South Central, total.....	458	183	10,213	70,515	8,679	17,815	57,841	587,915	1,436,416	1,943,936	592,194	294,603	80,395	12,275	440,047
Arkansas.....	6	2	139	876	117	227	692	2,336	14,483	16,701	4,083	2,217	118	205	4,114
Louisiana.....	72	25	1,472	10,085	1,221	2,595	7,988	154,851	496,919	636,722	119,989	52,264	15,048	1,208	56,550
North Louisiana.....	25	9	617	4,111	482	1,020	2,884	22,934	98,902	120,192	33,814	13,094	1,644	(NA)	(NA)
South Louisiana.....	47	16	855	5,974	739	1,575	5,104	131,917	398,017	516,530	86,175	39,170	13,404	(NA)	(NA)
Oklahoma.....	75	24	1,732	12,041	1,224	2,463	8,013	69,967	117,453	176,720	61,437	32,592	10,700	2,283	49,926
Texas, total.....	305	132	6,870	47,513	6,117	12,530	41,148	360,761	807,561	1,113,793	406,685	207,530	54,529	8,579	329,457
Texas Gulf Coast A.....	39	18	1,149	8,378	1,000	2,021	6,942	77,362	188,691	260,165	80,770	33,230	5,888	(NA)	(NA)
Texas Gulf Coast B.....	23	9	386	2,623	340	692	2,291	18,689	72,195	89,319	20,986	10,495	1,565	(NA)	(NA)
South Texas.....	34	15	930	6,673	864	1,817	5,993	51,471	149,379	194,553	69,535	33,410	6,297	(NA)	(NA)
Southwest Texas.....	6	2	77	497	70	151	452	2,399	6,341	8,645	2,638	1,068	95	(NA)	(NA)
North Central Texas A.....	17	5	275	1,630	247	493	1,399	9,607	9,945	18,726	9,606	5,597	826	(NA)	(NA)
North Central Texas B.....	29	8	376	2,268	318	688	1,983	10,112	22,010	29,874	10,614	6,298	2,248	(NA)	(NA)
East Texas A.....	12	4	137	929	130	273	900	9,100	18,460	33,226	8,745	3,510	4,334	(NA)	(NA)
East Texas B.....	30	19	777	5,321	682	1,441	4,409	24,963	87,393	106,636	51,836	21,105	5,720	(NA)	(NA)
West Texas A.....	63	29	1,554	10,914	1,430	2,854	9,808	93,033	104,338	180,578	85,879	52,542	16,793	(NA)	(NA)
West Texas B.....	20	8	355	2,337	305	627	2,006	11,227	25,085	33,411	15,882	10,548	2,901	(NA)	(NA)
Texas Panhandle.....	32	15	854	5,943	731	1,473	4,965	52,798	123,724	168,660	50,194	29,727	7,862	(NA)	(NA)
Mountain.....	60	23	1,179	8,095	1,062	2,179	7,295	47,207	160,143	200,062	61,647	35,143	7,288	1,205	39,408
Wyoming.....	17	3	240	1,709	230	448	1,646	8,610	25,132	32,141	12,160	5,645	1,601	250	3,990
Colorado.....	7	2	123	879	115	241	831	4,829	13,141	17,264	7,297	3,471	706	(NA)	(NA)
New Mexico.....	31	18	767	5,170	675	1,401	4,513	31,344	111,757	138,726	37,514	23,225	4,375	771	28,851
Pacific (California).....	55	18	1,323	10,337	1,197	2,374	9,171	63,929	156,675	217,710	70,206	26,308	2,894	1,801	59,553
<u>Type of Operation and Geographic Area</u>															
United States, total.....	652	245	13,859	96,553	11,939	24,455	80,745	762,070	2,141,788	2,800,802	808,479	398,272	113,856	16,514	587,580
Producing establishments...	645	245	13,851	96,487	11,931	24,438	80,679	762,617	2,141,608	2,800,802	808,479	398,272	103,423	(NA)	(NA)
Natural gasoline, total..	588	212	11,945	82,667	10,275	20,892	69,106	632,304	1,853,536	2,394,427	680,205	341,884	91,413	410,283	436,782
Absorption.....	350	154	8,488	58,615	7,212	14,461	48,328	375,705	1,232,318	1,560,861	464,797	228,759	47,162	8,185	258,551
Compression.....	37	2	231	1,277	210	444	1,137	4,272	5,998	9,829	6,350	3,990	441	179	3,119
Refrigeration.....	43	5	426	2,973	362	737	2,463	69,967	101,782	168,791	27,187	14,690	2,958	(NA)	(NA)
Charcoal or other.....	9	1	48	319	46	91	311	2,512	17,635	18,396	2,476	1,413	1,751	1,919	103,112
Combination.....	149	50	2,752	19,483	2,445	5,159	16,867	179,848	495,803	636,550	179,395	93,032	39,101	(NA)	(NA)
Cycle condensate, total..	48	25	1,646	11,943	1,432	3,056	10,041	120,318	220,268	331,385	128,274	53,861	9,201	1,992	75,265
Absorption.....	32	19	1,257	9,028	1,075	2,318	7,416	91,017	158,915	244,298	91,947	36,574	5,634	1,992	75,265
Other.....	16	6	389	2,915	357	738	2,625	29,301	61,353	87,087	36,327	17,287	3,567	(NA)	(NA)
Fractionating.....	9	8	260	1,877	224	490	1,532	9,995	67,804	74,990	( <sup>4</sup> )	( <sup>5</sup> )	2,809	( <sup>4</sup> )	( <sup>4</sup> )
Nonproducing establishments	7	-	8	66	8	17	66	( <sup>6</sup> )	10,980	-	-	-	10,433	( <sup>4</sup> )	( <sup>4</sup> )
Northeast and North Central.....	42	10	609	4,058	530	1,138	3,446	35,825	227,607	242,038	52,805	26,582	21,394	660	31,060
Natural gasoline:															
Absorption.....	22	7	352	2,403	307	638	2,061	23,449	156,057	175,686	36,025	17,306	3,820	(NA)	(NA)
Kansas.....	19	6	303	1,895	272	589	1,645	16,500	119,910	120,100	24,123	13,061	16,410	328	11,788
Natural gasoline:															
Absorption.....	10	4	163	1,042	145	291	913	8,247	59,325	67,039	11,749	5,748	533	(NA)	(NA)
West South Central, total.....	458	183	10,213	70,515	8,679	17,815	57,841	587,915	1,436,416	1,943,936	592,194	294,603	80,395	12,275	440,047
Producing establishments, total.....	454	-	10,212	70,503	8,678	17,811	57,829	588,457	1,425,957	1,943,936	592,194	294,603	70,478	(NA)	(NA)
Natural gasoline.....	405	156	8,582	58,853	7,242	14,760	48,001	462,968	1,196,342	1,597,871	465,492	245,049	61,439	410,283	436,782
Absorption.....	247	110	6,099	41,441	5,050	10,146	32,882	275,976	719,024	957,832	302,986	163,127	37,168	8,185	258,551
Refrigeration.....	27	3	229	1,570	187	385	1,231	56,032	19,150	73,314	13,028	7,327	1,868	(NA)	(NA)
Combination.....	111	40	2,073	14,765	1,852	3,877	12,941	125,466	438,479	543,315	136,118	72,011	20,630	(NA)	(NA)
Cycle condensate.....	43	21	1,465	10,521	1,274	2,730	8,869	115,178	181,542	288,219	117,021	48,635	8,501	1,992	75,265
Nonproducing establishments	4	-	1	12	1	4	12	542	10,459	-	-	-	9,917	( <sup>4</sup> )	( <sup>4</sup> )

See footnotes at end of table.

TABLE 2. General Statistics, by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Industry code, industry, geographic area, and type of operation <sup>1</sup>	1963												1958		
	Establishments		All employees		Production and related workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Value of net ship- ments and receipts <sup>2</sup>	Quantity of net ship- ments of natural gas liquids <sup>3</sup> (1,000 barrels)	Capital expendi- tures	All employ- ees	Value added in mining
	Total	With 20 em- ployees or more	Total	Payroll	Total	Man- hours	Wages								
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)								
<u>Type of Operation and Geographic Area—Continued</u>															
West South Central—Continued															
Louisiana, total.....	72	25	1,472	10,085	1,221	2,595	7,988	154,851	496,919	636,722	119,989	52,264	15,048	1,208	56,550
Natural gasoline, fractionating, and nonproducing.....	59	17	1,125	7,547	919	1,967	5,873	119,502	427,433	534,224	88,087	39,157	12,711	711	27,471
Absorption.....	30	7	591	3,817	443	948	2,666	36,375	174,566	208,410	33,241	14,941	2,531	576	23,671
Combination.....	19	10	418	2,951	385	822	2,702	28,646	231,871	257,669	42,331	20,931	2,848	(NA)	(NA)
Cycle condensate.....	13	5	347	2,538	302	628	2,115	35,349	69,486	102,498	31,902	13,107	2,337	497	29,079
North Louisiana, total.....	25	9	617	4,111	482	1,020	2,884	22,934	98,902	120,192	33,814	13,094	1,644	(NA)	(NA)
Natural gasoline and fractionating.....	21	6	462	2,941	346	759	1,922	14,127	75,697	88,865	22,359	7,905	959	(NA)	(NA)
Absorption.....	12	2	334	2,130	237	503	1,307	6,699	51,655	57,871	13,909	5,224	483	(NA)	(NA)
Cycle condensate (absorp- tion).....	4	3	155	1,170	136	261	960	8,807	23,205	31,327	11,455	5,189	685	(NA)	(NA)
South Louisiana, total.....	47	16	855	5,974	739	1,575	5,104	131,917	398,017	516,530	86,175	39,170	13,404	(NA)	(NA)
Natural gasoline, fractionating, and nonproducing.....	38	14	663	5,974	573	1,208	3,949	105,375	351,736	445,359	65,728	31,252	11,752	(NA)	(NA)
Absorption.....	18	5	257	1,687	206	445	1,359	29,676	122,911	150,539	19,332	9,717	2,048	(NA)	(NA)
Cycle condensate.....	9	2	192	1,368	166	367	1,155	26,542	46,281	71,171	20,447	7,918	1,652	(NA)	(NA)
Oklahoma.....	75	24	1,732	12,041	1,224	2,463	8,013	69,967	117,453	176,720	61,437	32,592	10,700	2,283	49,926
Natural gasoline: Combination.....	19	3	246	1,713	225	445	1,539	16,741	35,695	50,142	14,610	8,476	2,294	(NA)	(NA)
Texas, total.....	305	132	6,870	47,513	6,117	12,530	41,148	380,761	787,561	1,113,793	406,685	207,530	54,529	8,579	329,457
Natural gasoline, fractionating, and nonproducing.....	279	118	5,909	40,711	5,260	10,711	35,211	304,169	695,325	950,229	329,748	175,022	49,265	7,304	286,503
Absorption.....	169	84	4,133	28,223	3,691	7,415	24,417	201,349	469,427	641,151	237,627	126,494	29,625	5,745	197,839
Refrigeration.....	20	1	128	852	111	221	721	5,204	11,318	15,204	5,130	2,845	1,318	(NA)	(NA)
Charcoal and other.....	6	1	34	245	32	62	237	1,791	13,732	13,841	1,403	783	1,682	(NA)	(NA)
Combination.....	73	27	1,409	10,101	1,242	2,610	8,700	88,079	162,913	235,504	79,177	42,604	15,488	(NA)	(NA)
Cycle condensate.....	26	14	961	6,802	857	1,819	5,937	76,592	92,236	163,564	76,937	32,508	5,264	1,275	42,954
Absorption.....	16	11	748	5,262	655	1,394	4,483	53,458	58,526	108,508	49,374	20,381	3,476	(NA)	(NA)
Other.....	10	3	213	1,540	202	425	1,454	23,134	33,710	55,056	27,563	12,127	1,788	(NA)	(NA)
Texas Gulf Coast A, total.....	39	18	1,149	8,378	1,000	2,021	6,941	85,362	180,691	260,165	80,770	33,230	5,888	(NA)	(NA)
Natural gasoline and fractionating.....	34	15	805	5,808	723	1,437	5,026	49,302	158,917	202,455	51,445	20,455	5,774	(NA)	(NA)
Absorption.....	20	9	481	3,408	425	820	2,860	19,922	73,768	89,832	24,860	9,882	3,858	(NA)	(NA)
Cycle condensate.....	5	3	344	2,570	277	584	1,915	36,060	21,774	57,720	29,325	12,775	114	(NA)	(NA)
Texas Gulf Coast B.....	23	9	386	2,623	340	692	2,291	18,689	72,195	89,319	20,986	10,495	1,565	(NA)	(NA)
Natural gasoline: Absorption.....	9	5	206	1,408	196	390	1,284	7,281	43,899	50,925	8,538	4,737	255	(NA)	(NA)
South Texas, total.....	34	15	930	6,673	864	1,817	5,993	63,471	137,379	194,553	69,535	33,410	6,297	(NA)	(NA)
Natural gasoline.....	26	8	499	3,675	445	907	3,095	41,177	90,781	126,122	41,554	21,124	5,836	(NA)	(NA)
Absorption.....	18	5	387	2,896	341	690	2,394	33,001	68,191	95,967	35,194	17,772	5,225	(NA)	(NA)
Combination.....	8	3	112	779	104	217	701	8,176	22,590	30,155	6,360	3,352	611	(NA)	(NA)
Cycle condensate.....	8	7	431	2,998	419	910	2,898	22,294	46,598	68,431	27,981	12,286	461	(NA)	(NA)
Southwest Texas (natural gasoline).....	6	2	77	497	70	151	452	2,399	6,341	8,645	2,638	1,068	95	(NA)	(NA)
North Central Texas A (natural gasoline).....	17	5	275	1,630	247	493	1,399	9,607	9,945	18,726	9,606	5,597	826	(NA)	(NA)
Absorption.....	8	4	174	978	154	307	806	5,777	6,551	12,064	5,928	3,593	264	(NA)	(NA)

See footnotes at end of table.

**TABLE 2. General Statistics, by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Industry code, industry, geographic area, and type of operation <sup>1</sup>	1963												1958		
	Establishments		All employees		Production and related workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Value of net ship- ments and receipts <sup>2</sup>	Quantity of net ship- ments of natural gas liquids <sup>3</sup>	Capital expendi- tures	All employ- ees	Value added in mining
	Total	With 20 em- ployees or more	Total	Payroll	Total	Man- hours	Wages								
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 barrels)	(\$1,000)	(number)	(\$1,000)
Type of Operation and Geographic Area—Continued															
West South Central—Continued															
Texas—Continued															
North Central Texas B (natural gasoline and fractionating) ..	29	8	376	2,268	318	688	1,983	10,112	22,010	29,874	10,614	6,298	2,248	(NA)	(NA)
Absorption.....	16	5	230	1,412	186	408	1,204	6,128	16,809	21,982	7,010	4,257	955	(NA)	(NA)
Refrigeration.....	3	-	28	158	27	52	157	1,634	921	1,556	975	500	999	(NA)	(NA)
Combination.....	6	1	58	406	50	105	337	1,602	3,037	4,349	1,987	1,195	290	(NA)	(NA)
East Texas A (natural gaso- line, cycle condensate, and nonproducing).....	12	4	137	929	130	273	900	9,100	18,460	23,226	8,745	3,510	4,334	(NA)	(NA)
Natural gasoline: Absorption.....	5	2	73	478	69	149	478	2,143	10,551	11,863	2,313	983	831	(NA)	(NA)
East Texas B (natural gaso- line and cycle condensate) ..	30	19	777	5,321	682	1,441	4,409	24,963	87,393	106,636	51,836	21,105	5,720	(NA)	(NA)
Natural gasoline: Absorption.....	21	14	569	3,608	507	1,056	3,155	17,956	54,670	72,181	33,395	14,513	445	(NA)	(NA)
West Texas A, total.....	63	29	1,554	10,914	1,430	2,854	9,808	93,033	104,338	180,578	85,879	52,542	16,793	(NA)	(NA)
Natural gasoline.....	58	29	1,523	10,681	1,400	2,796	9,586	88,819	95,498	169,125	81,598	50,548	15,192	(NA)	(NA)
Absorption.....	33	18	948	6,605	894	1,736	6,086	59,513	51,388	113,332	53,990	34,832	9,169	(NA)	(NA)
Refrigeration.....	5	-	18	131	16	31	112	1,393	557	1,850	1,084	567	100	(NA)	(NA)
Combination.....	16	9	486	3,454	428	904	2,958	24,242	20,911	40,418	23,206	13,149	4,735	(NA)	(NA)
Cycle condensate.....	5	-	31	233	30	58	222	4,214	8,840	11,453	4,281	1,994	1,601	(NA)	(NA)
West Texas B (natural gaso- line and cycle condensate) ..	20	8	355	2,337	305	627	2,006	11,227	25,085	33,411	15,882	10,548	2,901	(NA)	(NA)
Natural gasoline: Absorption.....	10	7	259	1,628	220	446	1,407	6,962	17,031	23,156	11,943	8,331	837	(NA)	(NA)
Combination.....	5	1	69	510	64	134	470	3,738	6,667	8,898	2,965	1,592	1,507	(NA)	(NA)
Texas Panhandle, total.....	32	15	854	5,943	731	1,473	4,965	52,798	123,724	168,660	50,194	29,727	7,862	(NA)	(NA)
Natural gasoline.....	32	15	854	5,943	731	1,473	4,965	52,798	123,724	168,660	50,194	29,727	7,862	(NA)	(NA)
Absorption.....	25	13	737	5,147	635	1,274	4,331	47,216	109,623	149,145	44,064	26,389	7,694	(NA)	(NA)
Combination.....	4	2	92	610	78	152	511	5,103	5,914	10,871	4,691	2,587	146	(NA)	(NA)
Mountain.....	60	23	1,179	8,095	1,062	2,179	7,295	47,207	160,143	200,062	61,647	35,173	7,288	1,205	39,408
Natural gasoline: Absorption.....	32	20	827	5,558	746	1,478	5,032	32,216	130,822	160,317	48,525	28,234	2,721	(NA)	(NA)
Combination.....	15	2	226	1,559	202	443	1,368	13,139	11,405	20,999	10,445	5,499	3,545	(NA)	(NA)
Wyoming.....	17	3	240	1,709	230	448	1,646	8,610	25,132	32,141	12,160	5,645	1,601	250	3,990
Natural gasoline: Absorption.....	7	3	191	1,361	186	360	1,321	6,088	21,475	26,469	9,516	4,386	1,094	(NA)	(NA)
Combination.....	5	-	23	159	21	43	143	1,700	3,001	4,221	1,506	690	480	(NA)	(NA)
New Mexico.....	31	18	767	5,170	675	1,401	4,513	31,344	111,757	138,726	37,514	23,225	4,375	771	28,851
Natural gasoline: Absorption.....	19	15	509	3,295	448	879	2,889	21,048	90,737	110,251	29,576	18,710	1,534	(NA)	(NA)
Pacific (California).....	55	18	1,323	10,337	1,197	2,374	9,171	63,929	156,675	217,710	70,206	26,308	2,894	1,801	59,553
Natural gasoline: Absorption.....	40	13	1,033	8,090	956	1,880	7,428	34,588	128,646	161,044	50,162	18,864	2,190	(NA)	(NA)
Combination.....	8	4	198	1,498	163	334	1,135	25,415	8,966	34,284	15,226	5,866	97	(NA)	(NA)

Note: For an explanation of column captions, see appendix A.

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>General statistics for some States are not shown separately in this table in order to avoid disclosing figures for individual companies or because of the relatively small size of the statistics. Such States are shown below for 1963, with the number of establishments in each State (and in parentheses the number of employees or employment size range): Pennsylvania, 5 (15); Illinois, 3 (91); Michigan, 6 (54); North Dakota, 3 (83); West Virginia, 25 (250-499); Florida, 1 (20-49); Montana, 2 (10-19); Utah, 3 (20-49).

<sup>2</sup>Represents value of gross shipments and receipts less value of residue gas shipped and less cost of natural gas liquids and crude petroleum received for further processing.

<sup>3</sup>Represents gross shipments less natural gas liquids received for processing.

<sup>4</sup>Figures for fractionating plants and nonproducing establishments are included with those for natural gasoline plants, for 1963, with absorption plants, and probably with absorption plants for 1958.

<sup>5</sup>Not shown since the difference between shipments and liquids received for such plants primarily reflects changes in finished products and materials inventories.

<sup>6</sup>Not shown since the cost of supplies, purchased fuel and electric energy, contract work, and purchased machinery installed exceeds the capital expenditures.

TABLE 3A. Detailed Statistics, by Geographic Areas: 1963

Item	United States, total	Northeast and North Central		South Atlantic	East South Central		
		Region	Kansas		Division	Kentucky	Mississippi
Establishments, total.....number..	652	42	19	26	11	5	6
With 0 to 19 employees.....do....	407	32	13	20	6	2	4
With 20 to 99 employees.....do....	236	10	6	5	5	3	2
With 100 employees and over.....do....	9	-	-	-	-	-	-
Natural gas received for processing.....million cu. ft..	12,657,364	994,903	692,363	321,560	389,855	295,354	94,501
Net shipments of natural gas liquids.....1,000 barrels..	398,272	26,582	13,061	9,675	5,931	4,692	1,239
Value of shipments and receipts, total.....\$1,000..	2,800,802	242,038	120,100	119,250	77,806	54,586	23,220
Residue gas shipped.....do....	1,877,679	189,014	95,763	100,363	61,180		(D)
Natural gas liquids and crude petroleum received for processing.....do....	114,644	53,024	24,333	18,887	16,626	54,586	-
Net shipments and receipts, total.....do....	808,479						
Natural gas liquids.....do....	798,852						
Other products and services.....do....	9,627	(D)	(D)	164	(D)	-	(D)
Receipts for contract processing of natural gas <sup>1</sup> .....do....	32,884	(D)	(D)	-	-	-	-
Value added in mining.....do....	762,070	35,825	16,500	13,144	14,050	9,668	4,382
Persons in industry, total.....number..	13,940	617	303	305	230	144	86
Production and related workers, average for year.....do....	11,939	530	272	278	193	118	75
March.....do....	11,986	538	274	275	191	117	74
May.....do....	11,995	534	279	280	193	120	73
August.....do....	12,036	520	255	280	195	118	77
November.....do....	11,640	527	273	274	190	117	73
All other employees.....do....	1,920	79	31	27	37	26	11
Proprietors and firm members.....do....	81	8	-	-	-	-	-
Performing manual labor.....do....	15	2	-	-	-	-	-
Man-hours worked by production and related workers.....1,000..	24,455	1,138	589	561	388	238	150
Principal expenses designated below, total.....\$1,000..	2,210,073	230,989	121,628	108,942	65,951	46,013	19,938
Wages of production and related workers.....do....	80,745	3,446	1,645	1,731	1,261	755	506
Salaries of all other employees.....do....	15,808	612	250	212	344	202	142
Supplies.....do....	88,375	4,414	3,322	1,530	1,643		
Natural gas received for processing.....do....	1,841,309	201,131	99,332	103,470	62,190	44,962	18,871
Natural gas liquids and crude petroleum received for processing.....do....	114,644						
Purchased fuels.....do....	7,494						
Purchased electric energy.....do....	7,673	483	213	262	94	55	39
Contract work.....do....	54,025	19,463	15,450	882	146	6	140
Purchased machinery installed.....do....	39,068	676	177	197	205	6	199
Capital expenditures, total.....do....	113,856	21,394	16,410	1,090	795	144	651
Plant and other construction.....do....	70,788	20,168	16,039	901	354	77	277
New machinery and equipment.....do....	40,208	930	371	185	438	66	372
Used plant and equipment.....do....	2,860	296	-	4	3	1	2
Energy used.....million kwh. equivalent..	158,705	7,003	4,321	1,370	2,041	890	1,151
Residue gas.....million cu. ft..	479,747	19,773	11,137	(D)	(D)	(D)	(D)
Fuels purchased:							
Fuel oil <sup>2</sup> .....1,000 barrels..	10	-	-	-	-	-	-
Gas.....million cu. ft..	33,002	2,861	2,844	2,040	(D)	(D)	(D)
Gasoline.....1,000 gallons..	1,685	39	(D)	(D)	(D)	(D)	(D)
Other fuels.....\$1,000..	334	2	(D)	-	-	-	-
Electric energy purchased.....million kwh. equivalent..	775	38	19	29	7	4	3
Electric energy generated.....do....	1,767	44	40	(2)	14	8	6
Electric energy sold.....do....	42	4	4	-	-	-	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	3,887	148	76	66	69	45	24
Per production worker.....do....	326	278	279	238	356	383	302
Prime movers.....1,000 hp..	3,689	142	72	56	66	43	23
Electric motors driven by purchased energy.....do....	198	6	4	10	3	2	1
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	231	12	5	-	1	1	-

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Geographic Areas: 1963—Continued

Item	West South Central								
	Division, total	Arkansas	Louisiana			Oklahoma	Texas		
			State, total	North Louisiana	South Louisiana		State, total	Texas Gulf Coast A	Texas Gulf Coast B
Establishments, total.....number..	458	6	72	25	47	75	305	39	23
With 0 to 19 employees.....do....	275	4	47	16	31	51	173	21	14
With 20 to 99 employees.....do....	176	2	24	8	16	23	127	17	9
With 100 employees and over.....do....	7	-	1	1	-	1	5	1	-
Natural gas received for processing....million cu. ft..	9,356,424	130,787	2,726,877	493,696	2,233,181	878,443	5,620,417	1,151,523	467,529
Net shipments of natural gas liquids.....1,000 barrels..	294,603	2,217	52,264	13,094	39,170	32,592	207,530	33,230	10,495
Value of shipments and receipts, total.....\$1,000..	1,943,936	16,701	636,722	120,192	516,530	176,720	1,113,793	260,165	89,319
Residue gas shipped.....do....	1,262,624	(D)	495,781	82,264	413,517	(D)	647,697	143,527	59,821
Natural gas liquids and crude petroleum received for processing.....do....	89,118	-	20,952	4,114	16,838	8,715	59,451	35,868	8,512
Net shipments and receipts, total.....do....	592,194	(D)	119,989	33,814	86,175	(D)	406,685	80,770	20,986
Natural gas liquids.....do....	585,018	5,015	119,548	33,572	85,976	60,663	400,792	79,930	20,431
Other products and services.....do....	7,176	(D)	441	242	199	(D)	5,893	840	555
Receipts for contract processing of natural gas <sup>1</sup> .....do....	27,438	(D)	8,740	(D)	(D)	(D)	18,322	5,079	(D)
Value added in mining.....do....	587,915	2,336	154,851	22,934	131,917	69,967	360,761	77,362	18,689
Persons in industry, total.....number..	10,314	141	1,480	624	856	1,734	6,949	1,149	386
Production and related workers, average for year.....do....	8,679	117	1,321	482	739	1,224	6,117	1,000	340
March.....do....	8,692	125	1,233	485	748	1,249	6,085	999	344
May.....do....	8,688	119	1,205	477	728	1,235	6,129	993	346
August.....do....	8,771	114	1,240	495	745	1,218	6,199	1,014	337
November.....do....	8,490	111	1,199	474	725	1,186	6,094	985	326
All other employees.....do....	1,534	22	251	135	116	508	753	149	46
Proprietors and firm members.....do....	69	2	8	7	1	2	57	-	-
Performing manual labor.....do....	13	-	6	6	-	-	7	-	-
Man-hours worked by production and related workers.....1,000..	17,815	227	2,595	1,020	1,575	2,463	12,530	2,021	692
Principal expenses designated below, total.....\$1,000..	1,472,746	15,301	502,176	101,900	400,276	125,884	829,385	194,987	74,126
Wages of production and related workers.....do....	57,841	692	7,988	2,884	5,104	8,013	41,148	6,942	2,291
Salaries of all other employees.....do....	12,674	184	2,097	1,227	870	4,028	6,365	1,436	312
Supplies.....do....	73,438	240	22,499	1,618	20,881	5,289	45,410	8,097	1,747
Natural gas received for processing.....do....	1,198,769	13,449	435,065	91,596	343,469	93,032	637,223	139,422	60,725
Natural gas liquids and crude petroleum received for processing.....do....	89,118	-	20,952	4,114	16,838	8,715	59,451	35,868	8,512
Purchased fuels.....do....	4,365	653	1,363	56	1,307	242	2,107	845	4
Purchased electric energy.....do....	5,243	72	796	97	699	628	3,747	813	122
Contract work.....do....	31,298	11	11,416	308	11,108	9,937	13,934	1,564	393
Purchased machinery installed.....do....	34,185	58	4,828	1,113	3,715	3,610	25,689	2,082	692
Capital expenditures, total.....do....	80,395	118	15,048	1,644	13,404	10,700	54,529	5,988	1,565
Plant and other construction.....do....	42,895	105	12,206	507	11,699	6,260	24,324	2,761	797
New machinery and equipment.....do....	35,108	13	2,775	1,078	1,697	4,123	28,197	3,175	677
Used plant and equipment.....do....	2,392	-	67	59	8	917	2,008	11	91
Energy used.....million kwh. equivalent..	119,447	1,701	15,776	4,532	11,245	14,935	87,035	17,479	4,169
Residue gas.....million cu. ft..	363,655	3,372	43,801	14,110	29,691	47,036	269,446	51,694	12,952
Fuels purchased:									
Fuel oil <sup>2</sup> .....1,000 barrels..	10	-	-	-	-	-	10	(D)	-
Gas.....million cu. ft..	22,483	2,155	7,194	(D)	(D)	1,299	11,835	(D)	(D)
Gasoline.....1,000 gallons..	1,481	10	79	(D)	(D)	116	1,276	81	87
Other fuels.....\$1,000..	90	-	10	(D)	(D)	11	69	(D)	-
Electric energy purchased.....million kwh. equivalent..	549	7	80	10	70	55	407	113	10
Electric energy generated.....do....	1,573	3	101	37	64	111	1,358	190	65
Electric energy sold.....do....	35	-	-	-	-	(2)	35	2	7
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	2,932	34	313	85	228	451	2,134	325	86
Per production worker.....do....	338	288	257	177	308	368	349	325	254
Prime movers.....1,000 hp..	2,792	3	286	82	204	434	2,140	298	84
Electric motors driven by purchased energy.....do....	140	32	27	3	24	17	94	27	2
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	195	-	20	6	14	18	157	35	16

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Geographic Areas: 1963—Continued

Item	West South Central—Continued						
	Texas—Continued						
	South Texas	Southwest Texas	North Central Texas A	North Central Texas B	East Texas A	East Texas B	West Texas A
Establishments, total.....number..	34	6	17	29	12	30	63
With 0 to 19 employees.....do....	19	4	12	21	8	11	34
With 20 to 99 employees.....do....	13	2	5	8	4	19	29
With 100 employees and over.....do....	2	-	-	-	-	-	-
Natural gas received for processing....million cu. ft..	1,132,360	48,079	90,801	158,990	130,893	438,235	915,002
Net shipments of natural gas liquids.....1,000 barrels..	33,410	1,068	5,597	6,298	3,510	21,105	52,542
Value of shipments and receipts, total.....\$1,000..	194,553	8,645	18,726	29,874	23,226	106,636	180,578
Residue gas shipped.....do....	121,931	6,007	9,115	17,936	14,481	48,101	92,613
Natural gas liquids and crude petroleum received for processing.....do....	3,087	-	9,611	11,938	-	6,699	2,086
Net shipments and receipts, total.....do....	69,535	2,638			8,745	51,836	85,879
Natural gas liquids.....do....	69,199	2,638	9,389	10,598	8,319	50,570	84,254
Other products and services.....do....	336		(D)	(D)	426	1,266	1,625
Receipts for contract processing of natural gas <sup>1</sup> .....do....	1,426	(Z)	-	-	(Z)	(D)	(D)
Value added in mining.....do....	51,471	2,399	9,607	10,112	9,100	24,963	93,033
Persons in industry, total.....number..	930	77	280	451	137	786	1,554
Production and related workers, average for year.....do....	864	70	247	318	130	682	1,430
March.....do....	830	72	246	322	128	676	1,412
May.....do....	865	69	248	322	131	682	1,417
August.....do....	900	70	250	321	130	691	1,462
November.....do....	860	70	239	310	130	670	1,403
All other employees.....do....	66	7	28	58	7	95	124
Proprietors and firm members.....do....	-	-	5	43	-	9	-
Performing manual labor.....do....	-	-	1	2	-	4	-
Man-hours worked by production and related workers.....1,000..	1,817	151	493	688	273	1,441	2,854
Principal expenses designated below, total.....\$1,000..	152,934	6,826	11,348	23,934	16,215	88,810	105,873
Wages of production and related workers.....do....	5,993	452	1,399	1,983	900	4,409	9,808
Salaries of all other employees.....do....	680	45	231	285	29	912	1,106
Supplies.....do....	8,716	412	554	753	1,521	4,823	7,747
Natural gas received for processing.....do....	132,030	5,747	8,872	20,606	12,900	71,141	78,238
Natural gas liquids and crude petroleum received for processing.....do....	3,087	-			-	6,699	2,086
Purchased fuels.....do....	29	53	61	68	100	201	79
Purchased electric energy.....do....	258	71	125	102	26	186	1,089
Contract work.....do....	2,141	46	106	135	739	439	5,720
Purchased machinery installed.....do....	3,118	12	227	346	3,174	3,904	9,379
Capital expenditures, total.....do....	6,297	95	826	2,248	4,334	5,720	16,793
Plant and other construction.....do....	3,077	79	665	814	336	2,559	6,436
New machinery and equipment.....do....	3,204	4	141	511	3,392	3,134	10,105
Used plant and equipment.....do....	16	12	20	923	606	27	252
Energy used.....million kwh. equivalent..	14,974	958	1,751	2,585	1,380	7,820	20,075
Residue gas.....million cu. ft..	47,843	2,769	5,592	8,329	4,297	24,071	64,275
Fuels purchased:							
Fuel oil <sup>2</sup> .....1,000 barrels..	-	-	(D)	-	-	(D)	-
Gas.....million cu. ft..	736	(D)	(D)	-	(D)	(D)	578
Gasoline.....1,000 gallons..	106	(D)	27	206	244	79	204
Other fuels.....\$1,000..	-	-	(D)	(D)	(D)	-	(D)
Electric energy purchased.....million kwh. equivalent..	23	6	12	8	2	21	112
Electric energy generated.....do....	572	12	26	57	22	99	236
Electric energy sold.....do....	16	-	-	-	-	-	5
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	299	12	78	78	38	146	724
Per production worker.....do....	346	173	314	246	291	215	506
Prime movers.....1,000 hp..	295	11	74	75	37	141	697
Electric motors driven by purchased energy.....do....	4	1	4	3	1	5	27
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	23	1	1	2	4	15	43

See footnotes at end of table.



TABLE 3A. Detailed Statistics, by Geographic Areas: 1963—Continued

Item	West South Central—Continued		Mountain				Pacific (California)
	Texas—Continued		Division, total	Wyoming	Colorado	New Mexico	
	West Texas B	Texas Panhandle					
Establishments, total.....number..	20	32	60	17	7	31	55
With 0 to 19 employees.....do....	12	17	37	14	5	13	37
With 20 to 99 employees.....do....	8	13	23	3	2	18	16
With 100 or more employees.....do....	-	2	4	4	-	-	-
Natural gas received for processing....million cu. ft..	162,921	924,084	1,045,605	163,891	82,333	741,560	549,017
Net shipments of natural gas liquids.....1,000 barrels..	10,548	29,727	35,173	5,645	3,471	23,225	26,308
Value of shipments and receipts.....\$1,000..	33,411	168,660	200,062	32,141	17,264	138,726	217,710
Residue gas shipped.....do....	17,529	116,596	118,663	19,981	9,964	82,421	145,835
Natural gas liquids and crude petroleum received for processing.....do....	-	1,870	81,399	12,160	7,300	56,305	71,875
Net shipments and receipts, total.....do....	15,882	50,194					
Natural gas liquids.....do....	15,741	49,922					
Other products and services.....do....	141	272	61,086 (D)	12,160	(D) (D)	(D) (D)	70,118 (D)
Receipts for contract processing of natural gas <sup>1</sup> .....do....	(Z)	434	(D)		(D)	-	-
Value added in mining.....do....	11,227	52,798	47,207	8,610	4,829	31,344	63,929
Persons in industry, total.....number..	355	854	1,183	244	123	767	1,323
Production and related workers, average							
for year.....do....	305	731	1,062	230	115	675	1,197
March.....do....	306	750	1,084	233	116	693	1,206
May.....do....	305	751	1,083	231	114	696	1,217
August.....do....	311	713	1,076	231	117	685	1,194
November.....do....	295	706	992	220	113	620	1,167
All other employees.....do....	50	123	117	10	8	92	126
Proprietors and firm members.....do....	-	-	4	4	-	-	-
Performing manual labor.....do....	-	-	-	-	-	-	-
Man-hours worked by production and related workers.....1,000..	627	1,473	2,179	448	241	1,401	2,374
Principal expenses designated below, total.....\$1,000..	25,936	128,389	165,529	26,689	13,899	115,403	165,916
Wages of production and related workers.....do....	2,006	4,965	7,295	1,646	831	4,513	9,171
Salaries of all other employees.....do....	331	978	800	63	48	657	1,166
Supplies.....do....	1,741	9,099	2,999	1,044	544	3,288	4,351
Natural gas received for processing.....do....	21,318	107,753	152,092	23,615	11,872	105,612	149,183
Natural gas liquids and crude petroleum received for processing.....do....	-	1,870					
Purchased fuels.....do....	71	596	509	37	1	471	52
Purchased electric energy.....do....	78	877	675	117	77	432	916
Contract work.....do....	391	2,260	1,159	167	526	430	1,077
Purchased machinery installed.....do....	1,486	1,269	2,709	152	121	1,524	1,096
Capital expenditures, total.....do....	2,901	7,862	7,288	1,601	706	4,375	2,894
Plant and other construction.....do....	1,713	5,147	4,427	853	639	2,615	2,043
New machinery and equipment.....do....	1,185	2,669	2,764	717	64	1,697	783
Used plant and equipment.....do....	3	46	97	31	3	63	68
Energy used.....million kwh. equivalent..	4,425	11,419	17,639	2,638	1,361	12,239	11,205
Residue gas.....million cu. ft..	14,320	33,304	52,926	8,508	4,393	35,492	35,688
Fuels purchased:							
Fuel oil <sup>2</sup> .....1,000 barrels..	-	-	(D)	(D)	-	-	-
Gas.....million cu. ft..	(D)	(D)	4,175	-	-	4,175	(D)
Gasoline.....1,000 gallons..	203	24	108	46	3	59	(D)
Other fuels.....\$1,000..	(D)	-	12	4	-	8	(D)
Electric energy purchased...million kwh. equivalent..	6	94	51	10	7	31	101
Electric energy generated.....do....	67	21	130	37	12	78	7
Electric energy sold.....do....	2	3	3	3	-	-	(2)
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	138	210	338	61	33	238	334
Per production worker.....do....	451	288	318	255	291	353	279
Prime movers.....1,000 hp..	137	191	317	51	32	229	316
Electric motors driven by purchased energy.....do....	1	19	21	10	1	9	18
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	13	4	21	9	4	8	2

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

(2) Less than one-half of the unit of measure specified.

<sup>1</sup>Receipts for contract processing of natural gas is not included in the total value of shipments and receipts since it would duplicate, in part, the value of the products produced from such processing.

<sup>2</sup>For the United States includes 6 thousand barrels of distillate fuel oil and 4 thousand barrels of residual fuel oil.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1963

Item	Estab- lishments, total	Producing establishments											Non- producing estab- lishments
		Estab- lishments, total	Natural gasoline					Cycle condensate			Frac-tion- ating		
			Estab- lishments, total	Method of recovery				Estab- lishments, total	Method of recovery				
				Absorption	Com- pression	Refriger- ation	Charcoal and other		Com- bination	Absorption		Other	
Establishments, total.....number..	652	645	588	350	37	43	9	149	48	32	16	9	7
With 0 to 19 employees.....do....	407	400	376	196	35	38	8	99	23	13	10	1	7
With 20 to 99 employees.....do....	236	236	205	147	2	5	1	50	23	17	6	8	-
With 100 employees and over.....do....	9	9	7	7	-	-	-	-	2	2	-	-	-
Natural gas received for processing.....million cu. ft..	12,657,364	12,657,364	11,211,247	7,516,765	40,400	699,256	138,534	12,816,292	1,446,117	1,099,615	346,502	(1)	-
Net shipments of natural gas liquids.....1,000 barrels..	398,272	398,272	341,884	228,759	3,990	14,690	1,413	93,032	53,861	36,574	17,287	(2)	-
Value of shipments and receipts, total.....\$1,000..	2,800,802	2,800,802	2,394,427	1,560,861	9,829	168,791	18,396	636,550	331,385	244,298	87,087	74,990	-
Residue gas shipped.....do....	1,877,679	1,877,679	1,680,097	1,051,504	3,479	141,604	15,920	1,440,154	197,582	152,351	50,760	74,990	-
Natural gas liquids and crude petroleum received for processing.....do....	114,644	114,644	48,430	56,320									-
Net shipments and receipts, total.....do....	808,479	808,479	3,668,509	453,037	6,350	27,187	2,476	3,179,459	128,274	91,947	36,327	311,696	-
Natural gas liquids.....do....	798,852	798,852	659,459	447,247	6,350	27,187	2,476	176,199	127,697	91,381	36,316	11,696	-
Other products and services.....do....	9,627	9,627	19,050	5,790	-	-	-	13,260	577	566	11	(1)	-
Receipts for contract processing of natural gas.....do....	32,884	32,884	30,363	21,355	-	(D)	-	(D)	2,521	2,139	382	-	-
Value added in mining.....do....	762,070	762,617	632,304	375,705	4,272	69,967	2,512	179,848	120,318	91,017	29,301	9,995	(5)
Persons in industry.....number..	13,940	13,932	12,022	8,492	264	432	48	2,786	1,646	1,257	389	264	8
Production and related workers, average for year.....do....	11,939	11,931	10,275	7,212	210	362	46	2,445	1,432	1,075	357	224	8
March.....do....	11,986	11,978	10,326	7,277	215	367	46	2,421	1,410	1,075	335	261	7
May.....do....	11,995	11,987	10,320	7,267	210	373	46	2,424	1,442	1,080	362	225	7
August.....do....	12,036	12,028	10,327	7,199	208	361	46	2,513	1,455	1,091	364	230	8
November.....do....	11,640	11,632	10,029	7,031	207	344	46	2,401	1,414	1,050	364	175	10
All other employees.....do....	1,920	1,920	1,670	1,276	21	64	2	307	214	182	32	36	-
Proprietors and firm members.....do....	81	81	77	4	33	6	-	34	-	-	-	4	-
Performing manual labor.....do....	15	15	12	9	1	-	-	2	-	-	-	3	-
Man-hours worked by production and related workers.....1,000..	24,455	24,438	20,892	14,461	444	737	91	5,159	3,056	2,318	738	490	17
Principal expenses designated below, total.....\$1,000..	2,210,073	2,200,672	1,904,114	1,272,066	7,223	104,180	17,539	503,106	227,339	165,861	61,478	69,219	9,401
Wages of production and re-lated workers.....do....	80,745	80,679	69,106	48,328	1,137	2,463	310	16,867	10,041	7,416	2,625	1,532	66
Salaries of all other workers.....do....	15,808	15,808	13,561	10,287	140	510	9	2,616	1,902	1,612	290	345	-
Supplies.....do....	88,375	88,348	72,705	57,920	326	1,888	498	12,073	15,319	7,981	7,338	324	27
Natural gas received for processing.....do....	1,841,309	1,841,309	1,696,195	1,103,479	5,341	97,874	16,431	424,916	190,765	146,740	49,554	63,464	-
Natural gas liquids and crude petroleum received for processing.....do....	114,644	114,644											28,608
Purchased fuels.....do....	7,494	7,494	6,262	3,205	21	247	31	2,758	172	86	86	1,060	-
Purchased electric energy.....do....	7,673	7,672	7,047	4,290	78	432	13	2,234	428	157	271	197	1
Contract work.....do....	54,025	44,718	39,238	15,949	180	766	247	22,096	3,183	1,869	1,314	2,297	9,307
Purchased machinery installed.....do....	39,068	37,423	32,089	18,867	52	575	415	12,180	4,872	2,082	2,790	462	1,645
Capital expenditures, total.....do....	113,856	103,423	91,413	47,202	441	2,918	1,751	39,101	9,201	5,634	3,567	2,809	10,433
Plant and other construction.....do....	70,788	62,036	54,358	25,051	327	1,441	963	26,576	5,040	3,117	1,923	2,638	8,752
New machinery and equipment.....do....	40,208	38,529	34,263	20,739	101	487	783	12,153	4,140	2,500	1,640	126	1,679
Used plant and equipment.....do....	2,860	2,858	2,792	1,412	13	990	5	372	21	17	4	45	2
Energy used.....million kwh. equiv..	158,705	158,705	136,773	101,090	1,030	5,049	675	28,929	19,394	14,709	4,685	2,538	(2)
Residue gas.....million cu. ft..	479,747	479,747	414,962	308,237	3,287	15,987	1,564	85,887	62,793	47,730	15,063	1,992	-
Fuels purchased:													
Fuel oil.....1,000 barrels..	10	10	10	3	5	-	-	-	2	2	-	-	-
Gas.....million cu. ft..	33,002	33,002	26,852	18,630	(D)	(D)	611	7,310	-	-	-	6,150	-
Gasoline.....1,000 gallons..	1,685	1,681	1,450	1,120	-	21	-	309	111	94	17	21	4
Other fuels.....\$1,000..	334	334	242	207	-	11	-	24	82	-	82	10	-
Electric energy purchased.....million kwh. equiv..	775	775	699	415	6	37	5	236	46	17	29	30	(2)
Electric energy generated.....do....	1,767	1,767	1,057	829	(2)	10	4	214	615	586	29	95	-
Electric energy sold.....do....	42	42	40	36	-	-	-	4	-	-	-	2	-
Horsepower rating of power equip-ment (prime movers and electric motors driven by purchased energy), total.....1,000..	3,887	3,874	3,433	2,339	64	130	20	880	414	304	110	27	15
Per production worker.....do....	326	325	334	324	305	360	439	360	289	289	308	121	1,663

See footnotes at end of table.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1963—Continued

Item	Estab- lishments, total	Producing establishments											Non- pro- ducing estab- lish- ments
		Estab- lishments, total	Natural gasoline					Cycle condensate			Frac-tion- ating		
			Estab- lishments, total	Method of recovery				Estab- lishments, total	Method of recovery				
				Absorption	Com- pression	Refrig- eration	Charcoal and other		Com- bination	Absorption		Other	
Horsepower rating of power equip- ment (prime movers and electric motors driven by purchased energy)--continued													
Prime movers.....1,000..	3,689	3,676	3,253	2,235	62	121	18	817	402	298	104	21	13
Electric motors driven by purchased energy.....do....	198	198	180	104	2	9	2	63	12	6	6	6	(2)
Horsepower rating of electric motors driven by energy generated at the establishment..do....	231	231	190	130	2	3	-	55	40	34	6	1	(2)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
(Z) Less than one-half of the unit of measure specified.

<sup>1</sup>Figures for fractionating plants are included with those for natural gasoline plants with combination methods of recovery.  
<sup>2</sup>Not shown since the difference between shipments and liquids received for such plants primarily reflects changes in finished products and materials inventories.  
<sup>3</sup>Figures for other products and services of fractionating plants are included with similar receipts for natural gasoline plants with combination methods of recovery.  
<sup>4</sup>Receipts for contract processing of natural gas is not included in the total value of shipments and receipts since it would duplicate, in part, the value of the products produced from such processing.  
<sup>5</sup>Not shown since the cost of supplies, purchased fuels and electric energy, contract work, and purchased machinery installed exceeds the capital expenditures.

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963

Item	Establish- ments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
INDUSTRY 1321.—NATURAL GAS LIQUIDS											
Establishments.....number..	652	117	115	175	192	44	9	-	-	-	-
All employees:											
Total.....do....	113,859	273	778	2,462	5,769	2,750	1,378	-	-	-	-
Payroll.....\$1,000..	196,553	1,785	5,397	16,984	39,830	18,994	9,880	-	-	-	-
Production and related workers:											
Total.....number..	11,939	256	713	2,251	5,078	2,474	1,167	-	-	-	-
Man-hours.....1,000..	24,455	494	1,488	4,615	10,417	5,047	2,394	-	-	-	-
Wages.....\$1,000..	80,745	1,701	4,865	15,364	34,222	16,664	7,929	-	-	-	-
Value added in mining.....do....	762,070	23,781	60,793	120,681	334,908	151,914	69,993	-	-	-	-
Value of shipments and receipts.....do....	2,800,802	112,080	165,436	485,932	1,336,504	498,230	202,620	-	-	-	-
Capital expenditures.....do....	113,856	27,058	25,343	16,461	18,838	20,151	6,005	-	-	-	-
Producing establishments by type of operation, total.....number..	645	111	114	175	192	44	9	-	-	-	-
Natural gasoline subindustry, total.....do....	587	104	105	167	171	33	7	-	-	-	-
Absorption.....do....	350	38	52	106	123	24	7	-	-	-	-
Compression.....do....	37	24	5	6	2	-	-	-	-	-	-
Refrigeration.....do....	43	15	11	12	4	1	-	-	-	-	-
Charcoal and other.....do....	9	6	1	1	1	-	-	-	-	-	-
Combination.....do....	148	21	36	42	41	8	-	-	-	-	-
Cycle condensate subindustry, total.....do....	48	7	8	8	13	10	2	-	-	-	-
Absorption.....do....	32	2	4	7	10	7	2	-	-	-	-
Combination and other.....do....	16	5	4	1	3	3	-	-	-	-	-
Fractionating subindustry.....do....	10	-	1	-	8	1	-	-	-	-	-

<sup>1</sup>Includes figures for separately reported central offices and related facilities. These were not included in the figures distributed by size of establishment.

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1963 and 1958

(In thousands of dollars)

Ind. code	Industry and year	Value of shipments and receipts of establishments classified in the industry					Value of net shipments of natural gas liquids shipped by establishments in all industries		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total (produced in all industries)	Produced in this industry	Produced in other industries
1321	Natural gas liquids.....1963..	2,800,802	2,791,175	4,302	5,325	-	798,852	798,852	-
	.....1958..	1,625,098	1,617,511	1,703	5,879	-	699,328	699,328	-

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958

Product and geographic area	Unit of measure	1963			1958		
		Production for all purposes (quantity)	Total shipments (including interplant transfers) or receipts		Production for all purposes (quantity)	Total shipments (including interplant transfers) or receipts	
			Quantity	Value (\$1,000)		Quantity	Value (\$1,000)
United States, total:							
Natural gas liquids (gross) <sup>1</sup> .....	1,000 bbls..	458,812	458,197	913,496	358,894	359,589	841,358
Natural gas liquids received from other natural gas liquids plants for further processing.....	..do.....	51,286	51,286	92,891	64,702	64,702	142,030
Crude petroleum, including condensate, received for processing.....	..do.....	8,639	8,639	21,753	(NA)	(NA)	(NA)
Net natural gas liquids <sup>2</sup> .....	..do.....	398,892	398,272	798,852	294,192	294,887	699,328
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft.....	(X)	11,531,012	1,877,679	(X)	7,664,890	4776,153
Used for fuel at plant.....	..do.....	479,747	(X)	(X)	426,920	(X)	(X)
Northeast and North Central:							
Net natural gas liquids <sup>2</sup> .....	1,000 bbls..	27,909	26,582	51,622	16,337	16,151	38,773
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft.....	(X)	947,813	189,014	(X)	585,254	4125,450
Used for fuel at plant.....	..do.....	19,773	(X)	(X)	15,228	(X)	(X)
Kansas:							
Net natural gas liquids <sup>2</sup> .....	1,000 bbls..	13,520	13,061	23,494	5,359	5,177	10,957
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft.....	(X)	659,322	95,767	(X)	382,122	457,651
Used for fuel at plant.....	..do.....	11,137	(X)	(X)	6,144	(X)	(X)
South Atlantic:							
Net natural gas liquids <sup>2</sup> .....	1,000 bbls..	9,824	9,675	18,723	6,638	6,620	10,702
Residue gas shipped <sup>3</sup> .....	Million cu. ft.....	(X)	303,751	100,363	(X)	151,670	421,081
East South Central:							
Net natural gas liquids <sup>2</sup> .....	1,000 bbls..	6,072	5,931	12,285	7,265	7,312	12,158
Residue gas shipped <sup>3</sup> .....	Million cu. ft.....	(X)	417,636	61,180	(X)	584,956	424,649
Kentucky:							
Net natural gas liquids <sup>2</sup> .....	1,000 bbls..	4,832	4,692	9,654	6,518	6,572	10,291
Mississippi:							
Natural gas liquids <sup>1 5</sup> .....	..do.....	1,240	1,239	2,631	747	740	1,807
West South Central:							
Natural gas liquids (gross) <sup>1</sup> .....	..do.....	338,871	339,737	674,136	271,585	272,740	637,578
Natural gas liquids received from other natural gas liquids plants for further processing.....	..do.....	37,129	37,129	68,533	59,110	59,110	131,147
Crude petroleum, including condensate, received for processing.....	..do.....	8,005	8,005	20,585	(NA)	(NA)	(NA)
Net natural gas liquids <sup>2</sup> .....	..do.....	293,737	294,603	585,018	212,475	213,630	506,431
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft.....	(X)	8,471,102	1,262,624	(X)	5,241,323	4462,047
Used for fuel at plant.....	..do.....	363,655	(X)	(X)	319,634	(X)	(X)
Arkansas:							
Natural gas liquids <sup>1</sup> .....	1,000 bbls..	2,213	2,217	4,015	2,266	2,267	25,390
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft.....	(X)	(D)	(D)	(X)	33,539	42,707
Used for fuel at plant.....	..do.....	3,372	(X)	(X)	5,391	(X)	(X)
Louisiana:							
Natural gas liquids (gross) <sup>1</sup> .....	1,000 bbls..	62,369	62,052	140,500	28,406	28,645	81,088
Natural gas liquids and crude petroleum received for processing.....	..do.....	9,788	9,788	20,952	63,898	63,898	610,508
Net natural gas liquids <sup>2</sup> .....	..do.....	52,581	52,264	119,548	24,508	24,747	70,580
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft.....	(X)	2,618,195	495,781	(X)	876,149	491,253
Used for fuel at plant.....	..do.....	43,801	(X)	(X)	30,266	(X)	(X)
North Louisiana:							
Natural gas liquids (gross) <sup>1</sup> .....	1,000 bbls..	14,530	14,505	37,686	(NA)	(NA)	(NA)
Natural gas liquids and crude petroleum received for processing.....	..do.....	1,411	1,411	4,114	(NA)	(NA)	(NA)
Net natural gas liquids <sup>2</sup> .....	..do.....	13,119	13,094	33,572	(NA)	(NA)	(NA)
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft.....	(X)	467,643	82,264	(X)	(NA)	(NA)
Used for fuel at plant.....	..do.....	14,110	(X)	(X)	(NA)	(X)	(X)

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	Unit of measure	1963			1958		
		Production for all purposes (quantity)	Total shipments (including interplant transfers) or receipts		Production for all purposes (quantity)	Total shipments (including interplant transfers) or receipts	
			Quantity	Value (\$1,000)		Quantity	Value (\$1,000)
West South Central—Continued:							
Louisiana—Continued:							
South Louisiana:							
Natural gas liquids (gross) <sup>1</sup> .....	1,000 bbls..	47,839	47,547	102,814	(NA)	(NA)	(NA)
Natural gas liquids and crude petroleum received for processing.....	...do.....	8,377	8,377	16,838	(NA)	(NA)	(NA)
Net natural gas liquids <sup>2</sup> .....	...do.....	39,462	39,170	85,976	(NA)	(NA)	(NA)
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft.....	(X)	2,150,552	413,517	(X)	(NA)	(NA)
Used for fuel at plants.....	...do.....	29,691	(X)	(X)	(NA)	(X)	(X)
Oklahoma:							
Natural gas liquids (gross) <sup>1</sup> .....	1,000 bbls..	37,558	37,679	69,378	(NA)	(NA)	(NA)
Natural gas liquids and crude petroleum received for processing.....	...do.....	5,087	5,087	8,715	(NA)	(NA)	(NA)
Net natural gas liquids <sup>2</sup> .....	...do.....	32,471	32,592	60,663	28,168	28,162	54,964
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft.....	(X)	(D)	(D)	(X)	589,221	443,402
Used for fuel at plant.....	...do.....	47,036	(X)	(X)	47,849	(X)	(X)
Texas:							
Natural gas liquids (gross) <sup>1</sup> .....	1,000 bbls..	236,731	237,789	460,243	209,100	210,021	489,405
Natural gas liquids received from other natural gas liquids plants for further processing.....	...do.....	26,349	26,349	50,477	51,567	51,567	113,908
Crude petroleum, including condensate, received for processing.....	...do.....	3,910	3,910	8,974	(NA)	(NA)	(NA)
Net natural gas liquids <sup>2</sup> .....	...do.....	206,472	207,530	400,792	157,533	158,454	375,497
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft.....	(X)	4,976,524	647,657	(X)	3,742,414	4324,705
Used for fuel at plant.....	...do.....	269,446	(X)	(X)	235,528	(X)	(X)
Texas Gulf Coast A:							
Natural gas liquids (gross) <sup>1</sup> .....	1,000 bbls..	51,695	51,879	115,798	(NA)	(NA)	(NA)
Natural gas liquids and crude petroleum received for processing.....	...do.....	18,649	18,649	35,868	(NA)	(NA)	(NA)
Net natural gas liquids <sup>2</sup> .....	...do.....	33,046	33,230	79,930	(NA)	(NA)	(NA)
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft.....	(X)	1,048,441	143,527	(X)	(NA)	(NA)
Used for fuel at plant.....	...do.....	51,694	(X)	(X)	(NA)	(X)	(X)
Texas Gulf Coast B:							
Natural gas liquids (gross) <sup>1</sup> .....	1,000 bbls..	14,540	14,542	28,943	(NA)	(NA)	(NA)
Natural gas liquids and crude petroleum received for processing.....	...do.....	4,047	4,047	8,512	(NA)	(NA)	(NA)
Net natural gas liquids <sup>2</sup> .....	...do.....	10,493	10,495	20,431	(NA)	(NA)	(NA)
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft.....	(X)	438,325	59,821	(X)	(NA)	(NA)
Used for fuel at plant.....	...do.....	12,952	(X)	(X)	(NA)	(X)	(X)
South Texas:							
Natural gas liquids (gross) <sup>1</sup> .....	1,000 bbls..	34,587	34,966	72,286	(NA)	(NA)	(NA)
Natural gas liquids and crude petroleum received for processing.....	...do.....	1,556	1,556	3,087	(NA)	(NA)	(NA)
Net natural gas liquids <sup>2</sup> .....	...do.....	33,031	33,410	69,199	(NA)	(NA)	(NA)
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft.....	(X)	1,018,025	121,931	(X)	(NA)	(NA)
Used for fuel at plant.....	...do.....	47,843	(X)	(X)	(NA)	(X)	(X)
Southwest Texas:							
Natural gas liquids <sup>1 5</sup> .....	1,000 bbls..	1,070	1,068	2,439	(NA)	(NA)	(NA)
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft.....	(X)	41,135	6,037	(X)	(NA)	(NA)
Used for fuel at plant.....	...do.....	2,769	(X)	(X)	(NA)	(X)	(X)
North Central Texas A:							
Net natural gas liquids <sup>1 2</sup> .....	1,000 bbls..	5,597	5,597	9,389	(NA)	(NA)	(NA)
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft.....	(X)	70,170	9,115	(X)	(NA)	(NA)
Used for fuel at plant.....	...do.....	5,592	(X)	(X)	(NA)	(X)	(X)
North Central Texas B:							
Net natural gas liquids <sup>1 2</sup> .....	1,000 bbls..	6,298	6,298	10,598	(NA)	(NA)	(NA)
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft.....	(X)	133,861	17,936	(X)	(NA)	(NA)
Used for fuel at plant.....	...do.....	8,329	(X)	(X)	(NA)	(X)	(X)

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	Unit of measure	1963			1958		
		Production for all purposes (quantity)	Total shipments (including interplant transfers) or receipts		Production for all purposes (quantity)	Total shipments (including interplant transfers) or receipts	
			Quantity	Value (\$1,000)		Quantity	Value (\$1,000)
West South Central—Continued							
Texas—Continued							
East Texas A:							
Natural gas liquids <sup>1</sup> .....	1,000 bbls.....	3,520	3,510	8,319	(X)	(NA)	(NA)
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft..	(X)	115,805	14,481	(X)	(NA)	(NA)
Used for fuel at plant.....	..do.....	4,297	(X)	(X)	(NA)	(X)	(X)
East Texas B:							
Natural gas liquids (gross) <sup>1</sup> .....	1,000 bbls.....	23,600	23,639	57,269	(NA)	(NA)	(NA)
Natural gas liquids and crude petroleum received for processing..	..do.....	2,534	2,534	6,699	(NA)	(NA)	(NA)
Net natural gas liquids <sup>2</sup> .....	..do.....	21,066	21,105	50,570	(NA)	(NA)	(NA)
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft..	(X)	379,747	48,101	(X)	(NA)	(NA)
Used for fuel at plant.....	..do.....	24,071	(X)	(X)	(NA)	(X)	(X)
West Texas A:							
Natural gas liquids (gross) <sup>1</sup> .....	1,000 bbls.....	54,655	54,271	86,340	(NA)	(NA)	(NA)
Natural gas liquids and crude petroleum received for processing..	..do.....	1,729	1,729	2,086	(NA)	(NA)	(NA)
Net natural gas liquids <sup>2</sup> .....	..do.....	52,926	52,542	84,254	(NA)	(NA)	(NA)
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft..	(X)	750,876	92,613	(X)	(NA)	(NA)
Used for fuel at plant.....	..do.....	64,275	(X)	(X)	(NA)	(X)	(X)
West Texas B:							
Natural gas liquids <sup>1</sup> .....	1,000 bbls.....	10,530	10,548	15,741	(NA)	(NA)	(NA)
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft..	(X)	124,435	17,529	(X)	(NA)	(NA)
Used for fuel at plant.....	..do.....	14,320	(X)	(X)	(NA)	(X)	(X)
Texas Panhandle:							
Natural gas liquids (gross) <sup>1</sup> .....	1,000 bbls.....	29,748	30,555	51,792	(NA)	(NA)	(NA)
Natural gas liquids and crude petroleum received for processing..	..do.....	828	828	1,870	(NA)	(NA)	(NA)
Net natural gas liquids <sup>2</sup> .....	..do.....	28,920	29,727	49,922	(NA)	(NA)	(NA)
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft..	(X)	855,704	116,596	(X)	(NA)	(NA)
Used for fuel at plant.....	..do.....	33,304	(X)	(X)	(NA)	(X)	(X)
Mountain:							
Net natural gas liquids <sup>2</sup> .....	1,000 bbls.....	35,108	35,173	61,036	22,880	22,633	45,386
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft..	(X)	926,623	118,663	(X)	639,166	463,404
Used for fuel at plant.....	..do.....	52,926	(X)	(X)	38,665	(X)	(X)
Wyoming:							
Natural gas liquids <sup>1</sup> .....	1,000 bbls.....	5,623	5,645	(D)	2,547	2,522	5,779
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft..	(X)	141,192	19,981	(X)	46,310	44,106
Used for fuel at plant.....	..do.....	8,508	(X)	(X)	5,100	(X)	(X)
Colorado:							
Net natural gas liquids <sup>2</sup> .....	1,000 bbls.....	3,514	3,471	(D)	(NA)	(NA)	(NA)
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft..	(X)	73,105	9,964	(X)	(NA)	(NA)
Used for fuel at plant.....	..do.....	4,393	(X)	(X)	(NA)	(X)	(X)
New Mexico:							
Net natural gas liquids <sup>2</sup> .....	1,000 bbls.....	23,115	23,225	(D)	17,107	16,903	32,421
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft..	(X)	663,669	82,421	(X)	538,513	455,059
Used for fuel at plant.....	..do.....	35,498	(X)	(X)	28,548	(X)	(X)
Pacific (California):							
Net natural gas liquids <sup>2</sup> .....	1,000 bbls.....	26,242	26,308	70,118	28,597	28,541	85,878
Residue gas:							
Shipped <sup>3</sup> .....	Million cu. ft..	(X)	464,087	145,835	(X)	462,521	479,502
Used for fuel at plant.....	..do.....	35,688	(X)	(X)	44,316	(X)	(X)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Represents natural gasoline, plant condensate, and liquefied petroleum gases, including drip from lines, isopentane, and ethane. Also includes finished gasoline, kerosene, and distillate and residual oils produced at natural gasoline plants.<sup>2</sup>Represents gross natural gas liquids less natural gas liquids received from other natural gas liquids plants for further processing and less crude petroleum received for processing.<sup>3</sup>Represents all residue gas used by the reporting company at other company operations, gas returned to supplying producer, and gas delivered to other companies. For 1963, respondents were requested to report gas adjusted to a pressure base of 14.65 pounds absolute at 60°F but for 1958 they were requested to use 14.73 pounds absolute at the same temperature; no adjustment was made in the 1958 figures shown due to this change.<sup>4</sup>Not entirely comparable with the 1963 value reported for residue gas. For 1958, some respondents reported their residue gas as having no value, or only a nominal value. For 1963, all respondents were requested to attach a realistic value at the plant to their residue gas if it was not used at the plant for power or heat. For the United States total in 1958, if gas valued at less than 3.3 cents per MCF had been assigned the average value of gas reported valued at 3.3 cents or more, the total value of residue gas shipped would have been \$926,302 thousand.<sup>5</sup>No natural gas liquids or crude petroleum were received for processing in this State or district. Hence, these figures are equivalent to net natural gas liquids, see footnote 2.<sup>6</sup>Excludes crude petroleum received for processing, if any.

TABLE 6B. Product Classes—Indexes of Production and Unit Value for Primary Products Shipped by All Producers: 1963 and 1958

Product code	Product and year	Indexes (1954 = 100)	
		Production	Unit value
1321	Natural gas liquids.....1963...	164	122
	.....1958...	115	107
13212	Net natural gas liquids.....1963...	156	88
	.....1958...	115	104
13213	Residue gas.....1963...	170	<sup>1</sup> 147
	.....1958...	115	109

<sup>1</sup>The unit value relative for the period 1958-1963 was obtained by using for the value of residue gas shipped in 1958 the value estimate, on a basis comparable to 1963, indicated in table 6A, footnote 4.

TABLE 6C. Shipments of Primary Products Distributed by Unit Value: 1963

Product and average unit value at plant <sup>1</sup>	Unit of measure	Quantity shipped				Value of shipments			
		Quantity		Percent of total quantity		Value (\$1,000)		Percent of total value	
		United States	West South Central	United States	West South Central	United States	West South Central	United States	West South Central
Natural gas liquids, total.....	1,000 barrels..	458,197	339,737	100.0	100.0	913,496	674,136	100.0	100.0
Less than \$1.26.....	...do.....	4,134	3,284	0.9	1.0	4,386	3,472	0.5	0.5
\$1.26 to \$1.41.....	...do.....	43,801	36,969	9.6	10.9	58,631	49,560	6.4	7.4
\$1.42 to \$1.59.....	...do.....	44,216	32,282	9.6	9.5	66,640	48,254	7.3	7.2
\$1.60 to \$1.79.....	...do.....	85,719	55,974	18.7	16.5	144,887	95,056	15.9	14.2
\$1.80 to \$2.04.....	...do.....	87,103	66,690	19.0	19.4	165,363	125,021	18.1	18.6
\$2.05 to \$2.29.....	...do.....	73,562	52,916	16.1	15.6	157,318	113,556	17.2	16.9
\$2.30 to \$2.59.....	...do.....	67,700	57,553	14.8	17.0	165,204	141,566	18.0	20.7
\$2.60 to \$2.94.....	...do.....	33,411	23,645	7.3	7.0	92,833	65,654	10.2	9.8
\$2.95 to \$3.34.....	...do.....	15,755	9,829	3.4	2.9	48,324	29,786	5.3	4.4
\$3.35 and over.....	...do.....	2,796	595	0.6	0.2	9,910	2,211	1.1	0.3
Residue gas, total.....	Million cu. ft.	11,531,012	8,471,102	100.0	100.0	1,877,679	1,262,624	100.0	100.0
Less than 6.15¢.....	...do.....	441,790	440,700	3.8	5.2	21,439	21,373	1.1	1.7
6.95¢ to 7.84¢.....	...do.....	48,640	45,200	0.4	0.5	3,539	3,282	0.2	0.3
7.85¢ to 8.84¢.....	...do.....	106,740	-	0.9	-	9,597	-	0.5	-
8.85¢ to 9.99¢.....	...do.....	457,500	457,500	4.0	5.4	43,398	43,398	2.3	3.4
10.0¢ to 11.1¢.....	...do.....	507,720	348,700	4.4	4.1	53,370	36,817	2.8	2.9
11.2¢ to 12.5¢.....	...do.....	1,331,640	918,000	11.5	10.8	158,187	108,986	8.4	8.6
12.6¢ to 14.1¢.....	...do.....	2,257,626	1,689,970	19.6	20.0	295,896	225,356	15.7	17.8
14.2¢ to 15.9¢.....	...do.....	1,569,299	1,187,900	13.6	14.0	233,224	176,716	12.4	14.0
16.0¢ to 17.9¢.....	...do.....	1,066,160	784,500	9.2	9.3	175,952	130,400	9.4	10.3
18.0¢ to 20.4¢.....	...do.....	1,723,930	1,673,300	15.0	20.0	328,357	318,777	17.5	25.2
20.5¢ to 22.9¢.....	...do.....	990,895	919,500	8.6	10.9	211,482	195,751	11.3	15.5
23.0¢ to 25.9¢.....	...do.....	131,739	-	1.1	-	31,904	-	1.7	-
26.0¢ to 29.4¢.....	...do.....	145,746	-	1.3	-	40,720	-	2.2	-
29.5¢ to 33.4¢.....	...do.....	352,867	5,810	3.1	0.1	115,154	1,768	6.1	0.1
33.5¢ to 37.9¢.....	...do.....	39,693	-	0.3	-	13,975	-	0.7	-
38.0¢ and over.....	...do.....	359,027	-	3.1	-	141,485	-	7.5	-

<sup>1</sup>The "average values" are based on the entire shipments of the specified product by each establishment. Thus they are representative of varied average prices among establishments but not of variations within an establishment.

TABLE 7A. Supplies Used, by Geographic Areas and Type of Operation: 1963 and 1958

Supplies used, geographic area, and type of operation	Quantity (short tons)	Value (\$1,000)	Supplies used, geographic area, and type of operation	Quantity (short tons)	Value (\$1,000)
United States:			GEOGRAPHIC AREA—Continued		
Supplies used, total.....	(X)	88,375	West South Central—Continued		
Steel mill shapes and forms.....	21,751	4,849	Texas—Continued		
All other supplies.....	(X)	83,526	West Texas A:		
GEOGRAPHIC AREA			Supplies used, total.....	(X)	7,747
Northeast and North Central:			Steel mill shapes and forms.....	1,112	220
Supplies used, total.....	(X)	4,414	All other supplies.....	(X)	7,527
Steel mill shapes and forms.....	1,171	236	West Texas B:		
All other supplies.....	(X)	4,178	Supplies used, total.....	(X)	1,741
South Atlantic:			Steel mill shapes and forms.....	1,223	112
Supplies used <sup>1</sup> .....	(X)	1,530	All other supplies.....	(X)	1,629
East South Central:			Texas Panhandle:		
Supplies used, total.....	(X)	1,643	Supplies used, total.....	(X)	9,099
Steel mill shapes and forms.....	212	50	Steel mill shapes and forms.....	1,728	370
All other supplies.....	(X)	1,593	All other supplies.....	(X)	2,763
West South Central:			Mountain:		
Supplies used, total.....	(X)	73,438	Supplies used, total.....	(X)	2,999
Steel mill shapes and forms.....	17,526	3,813	Steel mill shapes and forms.....	1,200	236
All other supplies.....	(X)	69,625	All other supplies.....	(X)	2,763
Oklahoma:			Pacific (California):		
Supplies used, total.....	(X)	5,289	Supplies used, total.....	(X)	4,351
Steel mill shapes and forms.....	3,286	729	Steel mill shapes and forms.....	1,642	514
All other supplies.....	(X)	4,560	All other supplies.....	(X)	3,837
Texas:			TYPE OF OPERATION		
Supplies used, total.....	(X)	45,410	Producing establishments:		
Steel mill shapes and forms.....	13,628	2,750	Supplies used, total.....	(X)	88,348
All other supplies.....	(X)	42,660	Steel mill shapes and forms.....	21,751	4,849
Texas Gulf Coast A:			All other supplies.....	(X)	83,499
Supplies used, total.....	(X)	8,097	Natural gasoline and fractionating:		
Steel mill shapes and forms.....	472	85	Supplies used, total.....	(X)	73,029
All other supplies.....	(X)	8,012	Steel mill shapes and forms.....	20,927	4,634
Texas Gulf Coast B:			All other supplies.....	(X)	68,395
Supplies used, total.....	(X)	1,947	Absorption:		
Steel mill shapes and forms.....	1,996	254	Supplies used, total.....	(X)	57,920
All other supplies.....	(X)	1,693	Steel mill shapes and forms.....	14,446	3,399
South Texas:			All other supplies.....	(X)	54,521
Supplies used, total.....	(X)	8,716	Combination:		
Steel mill shapes and forms.....	3,712	696	Supplies used, total.....	(X)	12,073
All other supplies.....	(X)	8,020	Steel mill shapes and forms.....	4,800	643
East Texas B:			All other supplies.....	(X)	11,430
Supplies used, total.....	(X)	4,823	Cycle condensate:		
Steel mill shapes and forms.....	2,224	488	Supplies used, total.....	(X)	15,319
All other supplies.....	(X)	4,335	Steel mill shapes and forms.....	824	215
			All other supplies.....	(X)	15,104

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>No steel mill shapes and forms were reported used in this area.



TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954

Geographic area	Aggregate horsepower per production worker		1963 (1,000 horsepower)							
			Aggregate horse- power (prime movers and electric motors driven by pur- chased energy	Prime movers			Electric motors			
	1963	1954		Total	Highway type	All other equipment		Total	Driven by purchased energy	Driven by energy generated at same estab- lishment
						Driving generators	Not driving generators			
United States, total.....	326	214	3,887	3,689	311	419	2,959	429	198	231
GEOGRAPHIC AREA										
Northeast and North Central.....	278	170	148	142	16	25	101	18	6	12
Kansas.....	279	(NA)	76	72	7	13	52	9	4	5
South Atlantic.....	238	121	66	56	2	6	49	10	10	-
East South Central, total.....	356	207	69	66	2	5	59	4	3	1
Kentucky.....	383	216	45	43	(2)	3	40	3	2	1
Mississippi.....	302	176	24	23	2	2	19	1	1	-
West South Central, total.....	338	221	2,932	2,792	251	301	2,241	335	140	195
Arkansas.....	288	189	34	32	13	(2)	19	2	2	-
Louisiana, total.....	257	172	313	286	16	38	232	47	27	20
North Louisiana.....	177	(NA)	85	82	7	13	62	9	3	6
South Louisiana.....	308	(NA)	228	204	9	25	170	38	24	14
Oklahoma.....	368	237	451	434	59	33	342	35	17	18
Texas, total.....	349	225	2,134	2,040	163	229	1,648	251	94	157
Texas Gulf Coast A.....	324	(NA)	325	298	17	41	240	62	27	35
Texas Gulf Coast B.....	254	(NA)	86	84	4	18	62	18	2	16
South Texas.....	346	(NA)	299	295	15	40	240	27	4	23
Southwest Texas.....	173	(NA)	12	11	2	2	7	2	1	1
North Central Texas A.....	314	(NA)	78	74	9	5	60	5	4	1
North Central Texas B.....	246	(NA)	78	75	19	4	52	5	3	2
East Texas A.....	291	(NA)	38	37	13	2	22	5	1	4
East Texas B.....	215	(NA)	146	141	15	13	113	20	5	15
West Texas A.....	506	(NA)	724	697	41	72	584	70	27	43
West Texas B.....	451	(NA)	138	137	13	20	104	14	1	13
Texas Panhandle.....	288	(NA)	210	191	15	12	164	23	19	4
Mountain.....	318	238	338	317	29	52	236	42	21	21
Wyoming.....	255	168	61	51	4	14	33	19	10	9
Colorado.....	291	(NA)	33	32	3	4	25	4	1	3
New Mexico.....	353	253	238	229	21	34	174	17	9	8
Pacific (California).....	279	207	334	316	11	31	274	20	18	2
TYPE OF OPERATION										
Producing establishments, total.....	325	213	3,874	3,676	311	418	2,947	429	198	231
Natural gasoline, total.....	334	<sup>1</sup> 216	3,433	3,253	256	371	2,625	371	181	190
Absorption.....	324	<sup>2</sup> 211	2,339	2,235	180	246	1,809	236	105	131
Compression.....	305	<sup>2</sup> 178	64	62	4	5	53	4	3	1
Refrigeration.....	360	<sup>2</sup> 236	130	121	8	7	106	12	9	3
Charcoal and other.....	439		20	18	2	1	15	2	2	-
Combination.....	360		880	817	62	112	643	117	62	55
Cycle condensate, total.....	289	<sup>1</sup> 201	414	402	52	41	310	52	12	40
Absorption.....	289	( <sup>2</sup> )	304	298	48	33	218	40	6	34
Other.....	308	( <sup>2</sup> )	110	104	4	8	92	12	6	6
Fractionating.....	121	( <sup>3</sup> )	27	21	3	6	12	6	5	1
Nonproducing establishments.....	1,663	1,216	13	13	-	1	12	(2)	(2)	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

(Z) Less than one-half of the unit of measure specified.

<sup>1</sup>Includes figures for nonproducing establishments. For natural gasoline, see also footnote 3.<sup>2</sup>Figures for cycle condensate plants are included with those for natural gasoline plants. For natural gasoline, see also footnote 3.<sup>3</sup>Figures for fractionating plants are included with those for natural gasoline plants.

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963

Industry and item	Establishments, total	Establishments with average of--						
		1 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
INDUSTRY 1321.—NATURAL GAS LIQUIDS								
Establishments, total.....number..	652	599	44	9	-	-	-	-
Reporting water use, total.....do....	652	599	44	9	-	-	-	-
By source of water:								
Utility.....do....	82	80	2	-	-	-	-	-
Other than utility.....do....	534	484	41	9	-	-	-	-
Source not specified.....do....	36	35	1	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	149	147	2	-	-	-	-	-
1-9 million gallons.....do....	110	108	1	1	-	-	-	-
10-19 million gallons.....do....	66	66	-	-	-	-	-	-
20-99 million gallons.....do....	223	209	12	2	-	-	-	-
100 million gallons and over.....do....	104	69	29	6	-	-	-	-
Employees.....do....	13,859	9,482	2,750	1,378	-	-	-	-
Value added in mining.....\$1,000..	762,070	540,163	151,914	69,993	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
<sup>1</sup>Includes figures for separately reported central offices and related facilities. These were not included in the figures distributed by size of establishment.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour: 1963

(Not shown for this industry.)

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963

Ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production and related workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
INDUSTRY 1321.—NATURAL GAS LIQUIDS									
United States, total.....	652	13,859	96,553	11,939	24,455	80,745	762,070	2,800,802	113,856
Less than 0.10.....	153	3,407	23,811	3,062	6,208	21,015	463,119	1,386,692	52,533
0.10 to 0.19.....	174	4,141	28,636	3,700	7,630	24,773	198,180	683,755	24,727
0.20 to 0.29.....	87	1,725	12,163	1,548	3,121	10,585	49,533	254,201	5,691
0.30 to 0.39.....	61	1,294	8,748	1,123	2,324	7,468	26,267	178,207	6,236
0.40 to 0.49.....	25	782	5,802	713	1,436	5,093	12,644	79,706	1,014
0.50 to 0.59.....	31	653	4,188	571	1,090	3,645	10,199	66,591	2,227
0.60 to 0.69.....	18	241	1,597	214	460	1,404	2,472	15,334	431
0.70 to 0.79.....	10	145	1,077	123	250	953	1,461	23,410	48
0.80 to 0.89.....	10	127	850	115	267	752	991	17,292	214
0.90 to 0.99.....	5	85	638	85	161	638	651	4,499	15
1.00 and over.....	38	402	2,459	353	725	2,065	1,348	23,173	5,174
Undistributed <sup>2</sup> .....	40	857	6,584	332	783	2,354	( <sup>3</sup> )	67,942	15,546
Northeast and North Central, total.....	42	609	4,058	530	1,138	3,446	35,825	242,038	21,394
Less than 0.10.....	6	171	1,106	154	337	943	22,208	119,331	13,232
0.10 to 0.19.....	8	163	1,158	138	317	984	8,467	40,923	1,321
0.20 to 0.29.....	8	89	565	74	156	458	2,454	32,071	206
0.30 to 0.39.....	8	81	565	73	145	490	1,721	33,845	1,770
0.40 to 0.49.....	3								
0.50 to 0.59.....	1	68	429	60	114	370	894	9,067	84
0.60 to 0.69.....	1								
0.70 to 0.79.....	1								
0.80 to 0.89.....	3	25	151	21	44	133	126	750	2,236
0.90 to 0.99.....	3	12	84	10	25	68	( <sup>3</sup> )	6,051	2,545
Undistributed <sup>2</sup> .....	4								
South Atlantic, total.....	26	305	1,943	278	561	1,731	13,144	119,250	1,090
Less than 0.10.....	3								
0.10 to 0.19.....	2	168	1,161	149	312	1,012	11,396	105,421	897
0.20 to 0.29.....	1								
0.30 to 0.39.....	2	79	518	73	142	470	1,614	11,053	101
0.40 to 0.49.....	2								
0.50 to 0.59.....	2								
0.60 to 0.69.....	1	12	55	12	23	55	75	480	29
0.70 to 0.79.....	1								
0.80 to 0.89.....	1								
0.90 to 0.99.....	10	46	209	44	84	194	59	2,296	63
1.00 and over.....	4								
Undistributed <sup>2</sup> .....									
East South Central, total.....	11	230	1,605	193	388	1,261	14,050	77,806	795
Less than 0.10.....	3								
0.10 to 0.19.....	5	162	1,104	146	297	964	12,881	58,711	765
0.20 to 0.29.....	3	68	501	47	91	297	1,169	19,095	30
0.30 to 0.39.....	3								
0.40 to 0.49.....	3								
West South Central, total.....	458	10,213	70,515	8,679	17,815	57,844	587,915	1,943,936	80,395
Less than 0.10.....	112	2,618	18,461	2,347	4,724	16,280	372,701	1,017,401	34,949
0.10 to 0.19.....	129	3,122	21,389	2,810	5,745	18,493	146,885	496,471	20,045
0.20 to 0.29.....	60	1,160	8,179	1,055	2,156	7,200	33,578	151,835	4,312
0.30 to 0.39.....	44	977	6,467	824	1,741	5,332	19,306	105,240	3,175
0.40 to 0.49.....	14	453	3,221	411	861	2,798	7,020	33,369	747
0.50 to 0.59.....	24	453	2,671	392	728	2,330	7,426	48,630	1,803
0.60 to 0.69.....	13	186	1,179	165	367	1,029	1,797	11,568	271
0.70 to 0.79.....	4	44	323	38	80	321	438	1,511	5
0.80 to 0.89.....	9	124	836	112	261	738	974	17,139	205
0.90 to 0.99.....	3	66	483	66	125	483	492	3,601	9
1.00 and over.....	21	284	1,746	245	511	1,404	1,035	15,004	2,733
Undistributed <sup>2</sup> .....	25	726	5,560	214	516	1,433	( <sup>3</sup> )	42,167	12,141
Mountain, total.....	60	1,179	8,095	1,062	2,179	7,295	47,207	200,062	7,288
Less than 0.10.....	12	190	1,187	180	352	1,148	16,589	63,413	3,011
0.10 to 0.19.....	20	490	3,380	412	856	2,808	23,098	70,603	2,357
0.20 to 0.29.....	11								
0.30 to 0.39.....	4	268	1,830	258	516	1,761	7,042	36,981	840
0.40 to 0.49.....	2								
0.50 to 0.59.....	3	90	629	89	176	618	1,223	3,442	226
0.60 to 0.69.....	2								
0.70 to 0.79.....	2								
0.80 to 0.89.....	1	49	317	42	87	295	236	6,384	9
0.90 to 0.99.....	1								
1.00 and over.....	5	92	752	81	192	665	( <sup>3</sup> )	19,239	845
Undistributed <sup>2</sup> .....									
Pacific (California), total.....	55	1,323	10,337	1,197	2,374	9,171	63,929	217,710	2,894
Less than 0.10.....	17	281	2,069	252	519	1,794	37,760	72,739	437
0.10 to 0.19.....	10	183	1,432	174	379	1,362	9,314	25,434	246
0.20 to 0.29.....	7	266	1,937	215	405	1,492	7,483	49,984	690
0.30 to 0.39.....	3	99	850	99	184	850	2,602	11,399	833
0.40 to 0.49.....	3	199	1,708	195	368	1,639	3,604	18,110	52
0.50 to 0.59.....	3								
0.60 to 0.69.....	2	152	1,219	132	268	1,031	2,136	18,087	443
0.70 to 0.79.....	4								
0.80 to 0.89.....	1	95	735	83	161	626	951	19,802	37
0.90 to 0.99.....	1								
1.00 and over.....	3								
Undistributed <sup>2</sup> .....	2	48	387	47	90	377	79	2,155	156

<sup>1</sup>Note that in computing these ratios contract employment serving the establishment is excluded. The cost of contract work in 1963 amounted to 56 percent of the payroll for the Natural Gas Liquids Industry.

<sup>2</sup>Represents establishments with zero or negative value added; establishments with no employees; and for number of employees and payroll, includes figures for separately reported central offices and related facilities.

<sup>3</sup>Not shown since cost of supplies, purchased fuels and electricity, contract work, and purchased machinery exceeds value of shipments and receipts plus capital expenditures.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963

Industry and value added per employee class <sup>1</sup>	Number of employees	Number of establishments with average employment of--				
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees
	INDUSTRY 1321.—NATURAL GAS LIQUIDS					
Total.....	13,859	652	408	191	44	9
Less than \$3,000.....	217	23	19	4	-	-
\$3,000 to \$3,999.....	47	7	6	1	-	-
\$4,000 to \$4,999.....	123	7	5	1	1	-
\$5,000 to \$5,999.....	42	6	6	-	-	-
\$6,000 to \$6,999.....	43	7	7	-	-	-
\$7,000 to \$7,999.....	198	12	7	4	1	-
\$8,000 to \$8,999.....	168	9	7	2	-	-
\$9,000 to \$9,999.....	228	10	4	5	1	-
\$10,000 to \$12,499.....	264	21	19	2	-	-
\$12,500 to \$14,999.....	657	28	17	9	1	1
\$15,000 to \$17,499.....	442	19	10	6	3	-
\$17,500 to \$19,999.....	705	28	15	10	2	1
\$20,000 and over.....	9,806	435	254	142	32	7
Negative value added.....	2,919	27	19	5	3	-
No employees.....	-	13	13	-	-	-

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>In computing these ratios contract employment serving the establishment is excluded. The cost of contract work in 1963 amounted to 52 percent of payroll for the Natural Gas Liquids Industry.<sup>2</sup>Includes employment for central offices and related facilities.

TABLE 11. Hourly Earnings of Production and Related Workers for Establishments with 10 or More Employees, by Geographic Areas: 1963

Industry by hourly earnings classes	Number of employees <sup>1</sup>	Number of establishments with average employment of--									
		Total	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
	INDUSTRY 1321.—NATURAL GAS LIQUIDS										
Total.....	12,325	420	-	-	6	20	7	7	299	41	40
\$1.00 to \$1.49.....	97	3	-	-	-	-	-	-	2	1	-
\$1.50 to \$1.99.....	173	7	-	-	-	1	-	-	6	-	-
\$2.00 to \$2.49.....	663	27	-	-	-	1	-	-	25	1	-
\$2.50 to \$2.99.....	1,895	59	-	-	-	4	3	-	48	4	-
\$3.00 to \$3.49.....	4,719	157	-	-	3	10	2	5	105	17	15
\$3.50 to \$3.99.....	3,906	133	-	-	3	3	2	2	97	16	10
\$4.00 to \$4.49.....	410	20	-	-	-	1	-	-	13	1	5
\$4.50 and over.....	462	12	-	-	-	-	-	-	1	1	10
No production or related workers.....		2	-	-	-	-	-	-	2	-	-

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>Excludes figures for separately reported central offices and related facilities.

TABLE 12. Distribution of Operating Companies, by Employment Size and by Number of Establishments: 1958

Industry by establishment counts	Number of--		Number of establishments with average employment of--									
	Operating companies	Employees <sup>1</sup>	Total	0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1321.—NATURAL GAS LIQUIDS												
Total.....	164	13,859	652	117	115	176	191	44	9	-	-	-
Multunit companies, total.....	133	13,320	621	110	108	170	183	41	9	-	-	-
1 establishment <sup>2</sup> .....	60	1,067	60	17	10	17	12	3	1	-	-	-
2 establishments.....	26	1,001	53	9	14	16	11	1	2	-	-	-
3 or 4 establishments.....	17	1,019	61	10	19	16	12	3	1	-	-	-
5 or 6 establishments.....	7	876	39	7	4	9	16	3	-	-	-	-
7 to 9 establishments.....	4	810	32	2	8	13	5	3	1	-	-	-
10 to 14 establishments.....	6	1,237	67	7	15	19	22	4	-	-	-	-
15 to 19 establishments.....	3	747	54	26	5	8	13	2	-	-	-	-
20 or more establishments.....	10	6,563	255	32	33	72	92	22	4	-	-	-
Single unit companies.....	31	539	31	7	7	6	8	3	-	-	-	-

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>Includes employment for central offices and related facilities.<sup>2</sup>Represents companies having at least one establishment classified in other industries.

This is a detailed map of Texas, showing its counties and major cities. The map is divided into several regions: West Texas, North Central Texas, East Texas, South Texas, and the Gulf Coast. Major cities like Dallas, Houston, San Antonio, Austin, and El Paso are marked. The map also shows the state's borders with New Mexico, Oklahoma, Arkansas, Louisiana, and the Gulf of Mexico.

U.S. DEPARTMENT OF COMMERCE  
BUREAU OF THE CENSUS

## OIL AND GAS FIELD SERVICES

This report shows 1963 Census of Mineral Industries statistics for establishments classified in Industry Group 138, Oil and Gas Field Services. The separate industries included in this group are as follows:

### SIC Code and Title

- 1381—Drilling Oil and Gas Wells
- 1382—Oil and Gas Exploration Services
- 1389—Oil and Gas Field Services, Not Elsewhere Classified

### INDUSTRY DESCRIPTIONS

Industry 1381, Drilling Oil and Gas Wells. This industry represents establishments primarily engaged in drilling wells for oil or gas for others on a contract, fee, or other basis. This industry includes contractors that specialize in "spudding in," "drilling in," redrilling, and directional drilling.

Industry 1382, Oil and Gas Exploration Services. This industry represents establishments primarily engaged in geophysical, geological, and other exploration work on a contract, fee, or other basis.

Industry 1389, Oil and Gas Field Services, N.E.C. This industry represents establishments primarily engaged in performing oil and gas field services, not elsewhere classified, for others on a contract, fee, or other basis, such as excavating slush pits and cellars; grading and building foundations at well locations; well surveying; running, cutting, and pulling casings, tubes, and rods; cementing wells; shooting wells; perforating well casing; acidizing and chemically treating wells; and cleaning out, bailing, and swabbing wells.

Establishments primarily engaged in hauling oil and gas field supplies and equipment, and in oil and gas field machine-shop work, are not included in the mining division, according to the Standard Industrial Classification, and were not covered in the 1963, 1958, and 1954 censuses. In the 1939 census, when such establishments were included, receipts for hauling and machine-shop services accounted for about 8 percent of the total receipts for oil and gas field services, as then defined.

**SUBINDUSTRY AND TYPE OF OPERATION STATISTICS.** Separate subindustry statistics are shown in this report for establishments primarily performing 2 types of services in each of industries 1381 and 1382, and 11 types of services in industry 1389. (See tables 2 and 3B.)

Establishments classified in the Oil and Gas Field Services Industries, in general, filed one report for all oil and gas field services performed in the United States. However, each report contained detailed data on the kinds of work performed and the locations of the work. All reports were classified on the basis of the principal kind of work performed and the principal State or district for Louisiana, Texas, and New Mexico in which the service was performed. Table 3B shows, in detail, the receipts for each type of service performed by subindustry classifications of service establishment reports. Table 3A

shows the total receipts for oil and gas field services performed in selected geographical areas as percents of the total receipts by establishments classified in that area. The figures indicate a fairly high degree of concentration of activities, although some contractors performed services in almost every oil-producing State.

Some companies primarily performing oil and gas field services also operated oil or gas properties. Such companies were required to file separate reports for each State (or district for Louisiana, Texas, and New Mexico) in which oil and gas field properties were operated and each report was classified on the basis of whether receipts from production or service activities in the State or district were greater. Separate statistics are shown in tables 2A and 3B for service establishments with and without well operations. About 8 percent of all service establishments included well operations, but reports including well operations accounted for over 13 percent of all establishments primarily engaged in drilling oil, gas, dry, or service wells. Service establishments operated about 7,500 oil and gas wells and drilled about 2,000 wells as operator. They produced about 14 million barrels of oil and 53 billion cubic feet of gas, but these each amounted to less than one percent of the total U.S. production of oil and gas.

**PRIMARY AND SECONDARY SERVICES.** The total receipts of the Oil and Gas Field Services Industries in 1963 were \$1,818 million. Of this total, the Drilling Oil and Gas Wells Industry accounted for \$979 million, of which \$906 million were for receipts for services primary to the industry, \$19 million for services classified in other industries in Industry Group 138, nearly \$46 million for shipments of crude petroleum and natural gas, \$4 million for hauling and other services classified in other industries and miscellaneous receipts, and \$5 million for shipments of products purchased for resale without further processing. The Oil and Gas Exploration Services Industry accounted for \$120 million, of which \$108 million were for receipts for services primary to the industry, \$4 million for services classified in other industries in Industry Group 138, and \$8 million for products purchased for resale. The Oil and Gas Field Services, N.E.C., Industry accounted for \$719 million, of which \$624 million were for services primary to the industry, \$15 million for services classified in other industries in Industry Group 138, \$5 million for shipments of crude petroleum and natural gas, over \$6 million for hauling and other services classified in other industries and miscellaneous receipts, and \$69 million for shipments of products purchased for resale.

In addition to the services by industries covered in this report, establishments classified in other mineral industries and in manufacturing industries, principally in the Crude Petroleum and Natural Gas Industry, reported receipts of \$52 million for oil and gas field services performed for others.

The general statistics (employment, payrolls, receipts for services and shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the performance of secondary services or production of minerals. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7 to 12) with receipts for oil and gas field services by all industries and drilling statistics for all contract drilled wells (tables 6A and 6E). The extent of the "activity mix" is indicated in table 5A which shows the primary and secondary activities of an industry and also the receipts for primary services performed in the industry and, separately, those performed as secondary activities in other industries.

**STATE, DISTRICT, AND COUNTY STATISTICS.** Each report for all oil and gas field operations in the United States contained an inquiry requesting, by State and county, for 1963 the receipts for services performed for others, the quantity of crude petroleum and natural gas shipped, employment on March 15, and capital expenditures. State or district reports requested such information by county within the State or district. This county

distribution was not completely reported; but the distributed figures accounted for over 95 percent of the total receipts for services.

General statistics, by county, were completed for each establishment by allocating the reported totals on the basis of the reported county figures. All employment, payroll, and man-hour figures were allocated on the basis of the reported March 15 employment. Other allocated figures were based on partly estimated "receipts for services and shipments," by county, and on capital expenditures. "Receipts for services and shipments" were estimated, by county, by adding to the reported receipts for services the estimated value of crude petroleum and natural gas shipped—approximated by multiplying the average unit values of crude petroleum and natural gas, indicated by reported figures for each establishment, by the reported county quantity figures. These county figures, together with counts of "county establishments," are shown in table 2B.

**DRILLING COSTS.** The principal product of the oil and gas field services industries is completed oil and gas wells. Detailed statistics for the number, footage, and cost of drilling and completing oil, gas, dry, and service wells completed in 1963 are shown in the report for the Crude Petroleum and Natural Gas Industry. Drilling contractors were also asked to report data on the number, footage, and total costs borne directly by them in drilling wells. These statistics are shown in table 6E of this report.

Drilling contractors reported drilling and completing 36,162 wells during 1963, as compared with a total of 41,531 wells reported by operators of oil and gas field properties as drilled and completed during the year. Thus, about 87 percent of all wells were drilled by contractors in 1963. Operating companies reported paying \$1,039 million to contractors for drilling wells completed during 1963, of which \$848 million was paid to drilling contractors. Contract drillers reported receipts, for drilling oil, gas, dry, and service wells, amounting to \$823 million and, in addition, contractors reported receipts of \$129 million for drilling in, spudding in, tailing in, and reworking wells; \$58 million for running, cutting, and pulling casing, tubes, and rods; \$87 million for cementing wells; and \$7 million for excavating slush pits and cellars. Most of these costs would be charged by the operating company to cost of drilling and completing wells. Other major contract receipts which would be partly so charged by operating companies are \$112 million for geophysical and other exploration work, \$119 million for well surveying and well logging, \$31 million for perforating well casing, and \$77 million for acidizing and other chemical treatment of wells.

The kinds of wells drilled on contract in 1963, as reported by drilling contractors, were 18,624 oil wells, 3,515 gas wells, 12,636 dry holes, and 1,387 service wells. Operating companies reported that 19,629 oil wells, 4,548 gas wells, 14,730 dry holes, and 2,624 service wells were drilled and completed in 1963. Some contractors found it difficult to report the kind of wells drilled, since the wells were frequently drilled into producing sands by the operators themselves and the contractor's records did not always indicate whether or not the hole resulted in a producing well; if a producer, whether the principal product was oil or gas; or if not a producer, whether the hole would be used as a service well. Thus, the detail tabulated, by kind of well, for contractors is less reliable than the total shown for all wells. A production and unit value index was constructed for drilling oil and gas wells contractors on the basis of the data reported on footage and cost of wells drilled by contractors and on the reported receipts for contract drilling. This production index for the primary services of the Drilling Oil and Gas Wells Industry increased to 99 in 1963 from the 1958 level of 94. The unit value index for 1963 was 104 compared to 106 in 1958. Both indexes were computed on a basis of 1954 = 100.



PAYMENTS AND RECEIPTS FOR OIL AND GAS FIELD SERVICES. The following table shows, for divisions and selected States, the total receipts for oil and gas field services performed by all establishments classified in the mineral industries and the total payments for such services by the Crude Petroleum and Natural Gas and Oil and Gas Field Services Industries. In this table, the receipts for oil and gas field services shown are based on the data reported by State and county and, thus, should be comparable, by area, with the figures reported by operators of oil and gas field properties. Since the allocation by State was not completely reported, some of the area differences are due to some over-allocation of data from some of the smaller reports to the principal State in which services were performed. Differences between payments and receipts also result from the exclusion from "receipts for oil and gas field services" of hauling and machine shop work; and from the probable exclusion from "payments for contract work" and inclusion as "cost of purchased machinery" of some services performed by contractors who furnished and installed machinery.

# PAYMENTS AND RECEIPTS FOR OIL AND GAS FIELD SERVICES: 1963

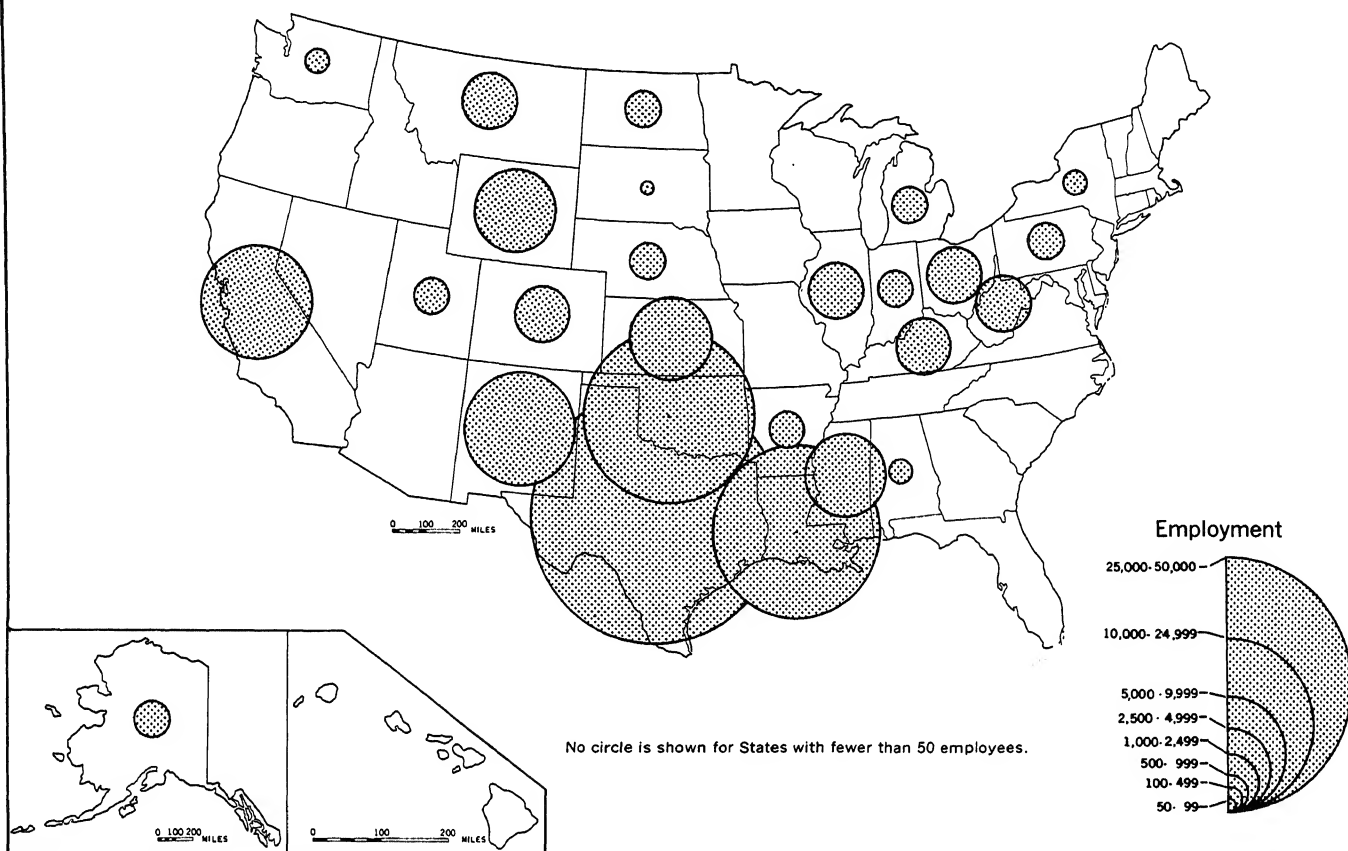
Geographic division and State	Payments for services reported by industry using the service (\$1,000,000)			Receipts for services reported by the service establishment (\$1,000,000)			
	Total	Contract services for the crude petro- leum and natural gas industry	Subcon- tract services for the oil and gas field services indus- tries	Total	By the oil and gas field serv- ices in- dustries	By the crude petro- leum and natural gas indus- try <sup>1</sup>	By the natural gas liquids industry
United States, total.....	1,560.0	1,459.0	101.0	1,737.7	1,685.7	46.7	5.3
Middle Atlantic.....	11.6	11.1	0.5	14.6	14.0	0.6	-
Pennsylvania.....	9.3	8.9	0.4	12.1	11.7	0.4	-
East North Central..	42.1	40.2	1.9	58.5	54.2	4.3	-
West North Central..	71.6	66.5	5.1	79.1	71.7	7.4	-
Nebraska.....	8.3	7.6	0.7	7.5	7.3	0.2	-
Kansas.....	51.9	48.6	3.3	59.3	52.7	6.6	-
South Atlantic.....	22.4	21.5	0.9	17.1	15.9	1.2	-
East South Central..	59.2	50.9	8.3	58.3	56.5	1.8	-
Kentucky.....	11.1	10.7	0.4	10.9	10.1	0.8	-
Mississippi.....	39.8	34.0	5.8	40.8	40.0	0.8	-
West South Central..	1,022.6	953.4	69.2	1,252.2	1,222.5	24.4	5.3
Louisiana.....	406.3	375.4	30.9	432.1	428.7	3.4	-
Texas.....	483.4	452.3	31.1	682.1	662.8	14.0	5.3
Mountain.....	176.0	166.1	9.9	143.9	140.9	3.0	-
Montana.....	21.1	19.2	1.9	16.9	16.7	0.2	-
Wyoming.....	43.0	41.2	1.8	42.0	41.2	0.8	-
Colorado.....	16.5	15.7	0.8	14.1	13.5	0.6	-
New Mexico.....	75.1	71.9	3.2	59.8	58.4	1.4	-
Pacific.....	154.6	149.4	5.2	114.0	110.0	4.0	-
California.....	122.9	118.3	4.6	99.2	96.2	3.0	-

- Represents zero.

<sup>1</sup>Includes receipts for oil and gas field services in mineral services industries other than oil and gas field services industries, and in manufacturing industries, amounting to less than \$2 million.

# OIL AND GAS FIELD SERVICES

Distribution of Employment by State: 1963



## Employment: 1840-1963

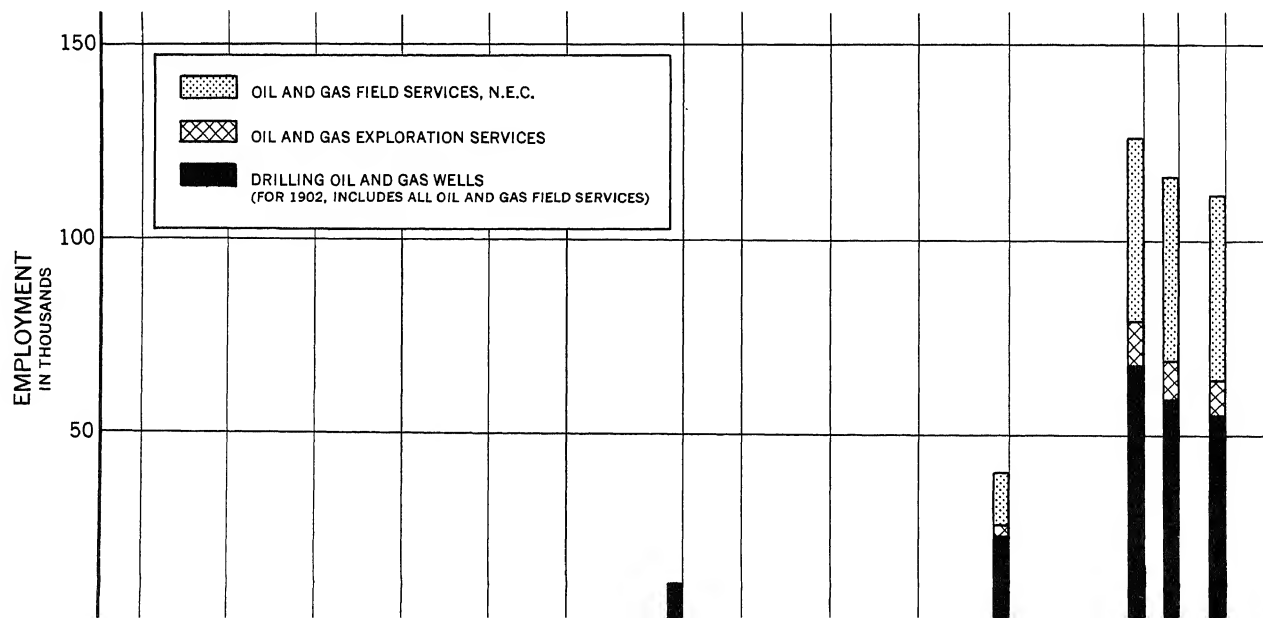


TABLE 1. General Statistics: 1963 and Earlier Years

Year	Operating companies (number)	Establishments		All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Selected expenses			Receipts for services and shipments (\$1,000)	Net receipts for services and shipments <sup>2</sup> (\$1,000)	Capital expenditures (\$1,000)	Horse-power rating of power equipment (1,000)
		Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)		Supplies and purchased fuels and electric energy <sup>1</sup> (\$1,000)	Sub-contract work (\$1,000)	Purchased machinery installed (\$1,000)				
GROUP 138.—OIL AND GAS FIELD SERVICES																
1963.....	5,915	6,212	1,248	112,373	631,727	96,593	206,588	517,393	1,241,354	515,738	100,953	187,755	1,817,894	1,736,309	227,906	10,187
1958.....	5,686	5,919	1,308	116,281	561,256	98,071	212,300	437,632	1,107,787	476,450	64,945	128,419	1,626,851	1,564,531	151,483	(NA)
1954 <sup>3</sup> .....	5,463	5,515	1,437	125,889	541,646	112,131	247,275	452,657	1,118,544	491,648	62,326	176,405	1,631,020	1,577,017	217,903	8,076
1939.....	1,619	(NA)	(NA)	39,762	65,219	35,159	57,720	51,523	(NA)	(NA)	(NA)	(NA)	(NA)	187,539	(NA)	932
1902 <sup>4</sup> .....	(NA)	(NA)	(NA)	11,217	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	17,416	(NA)	(NA)
Industry 1381.—Drilling Oil and Gas Wells																
1963.....	2,671	2,836	746	55,416	318,150	50,333	106,266	281,064	653,337	276,271	82,053	115,681	979,316	974,546	148,026	5,253
1958.....	2,911	3,064	830	59,411	289,243	52,274	109,470	239,328	587,440	283,694	51,366	84,457	904,939	902,721	102,018	(NA)
1954 <sup>3</sup> .....	2,846	2,869	878	67,976	304,312	62,145	133,216	264,797	623,967	335,813	46,048	120,385	972,745	968,129	153,468	4,265
1939.....	985	(NA)	(NA)	24,224	41,937	22,548	38,621	36,020	(NA)	(NA)	(NA)	(NA)	(NA)	128,107	(NA)	678
Industry 1382.—Oil and Gas Exploration Services																
1963.....	359	373	68	8,683	47,828	7,232	16,246	36,915	89,988	26,294	5,204	10,064	119,824	111,704	11,726	877
1958.....	329	347	76	9,557	43,649	7,559	16,695	31,115	64,353	20,226	3,643	6,075	87,215	86,108	7,082	(NA)
1954.....	309	330	(NA)	11,488	49,467	10,010	23,978	40,813	81,301	27,172	6,547	6,537	114,815	(D)	6,742	935
1939.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	12,642	(NA)	(NA)
Industry 1389.—Oil and Gas Field Services, N.E.C.																
1963.....	2,901	3,003	434	48,274	265,749	39,028	84,076	199,414	498,029	213,173	13,696	62,010	718,754	650,059	68,154	4,057
1958.....	2,456	2,504	411	47,278	228,023	38,212	86,060	166,926	455,994	172,337	9,767	37,843	633,729	575,702	42,212	(NA)
1954.....	2,313	2,316	(NA)	46,425	187,867	39,976	90,081	147,047	413,276	128,663	9,731	49,483	543,460	(D)	57,693	2,876
1939 <sup>5</sup> .....	558	(NA)	(NA)	11,267	14,989	10,007	13,950	11,815	(NA)	(NA)	(NA)	(NA)	(NA)	46,790	(NA)	(NA)
Survey, log, cement services subindustry:																
1963.....	240	268	29	11,138	81,805	8,251	20,584	55,201	173,821	72,005	1,374	22,134	245,335	195,814	23,999	1,138
1958.....	182	199	33	12,081	74,857	8,180	20,782	45,186	167,391	54,850	169	10,133	220,829	174,515	11,714	(NA)
1954.....	123	124	(NA)	10,468	53,733	7,698	23,934	33,846	145,686	51,659	1,429	14,518	191,336	150,841	21,956	993
1939.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	14,395	(NA)	(NA)
Miscellaneous oil and gas field services subindustry:																
1963.....	2,665	2,735	405	37,136	183,944	30,777	63,492	144,213	324,208	141,168	12,322	39,876	473,419	454,245	44,155	2,919
1958.....	2,276	2,305	378	35,197	153,166	30,032	65,278	121,740	288,603	117,487	9,598	27,710	412,900	401,187	30,498	(NA)
1954.....	2,190	2,192	(NA)	35,957	134,134	32,278	66,147	113,201	267,590	77,004	8,302	34,965	352,124	(D)	35,737	1,883
1939.....	535	(NA)	(NA)	10,227	12,635	9,169	12,235	10,055	(NA)	(NA)	(NA)	(NA)	(NA)	32,395	(NA)	(NA)

Note: See appendix A for explanation of column captions. For more detailed historical statistics for these industries see table 1 of the corresponding chapter of the 1954 Census of Mineral Industries, Vol. 1.

Standard Notes: - represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. n.e.c. Not elsewhere classified.

<sup>1</sup>Includes the cost of gas purchased for gas lift and repressuring and the cost of products purchased for resale.

<sup>2</sup>Represents gross receipts for services and shipments less value of shipments of products purchased for resale without further processing.

<sup>3</sup>Excludes figures for Alaska. For 1958, 2 establishments in the drilling oil and gas wells industry, 1 establishment in the oil and gas exploration services industry, and 1 establishment in the oil and gas field services, n.e.c. industry were reported; for 1954, 1 establishment in the drilling oil and gas wells industry was reported.

<sup>4</sup>Represents number of employees engaged in contract work and payments for contract work as reported by companies operating oil and gas field properties.

<sup>5</sup>Except for net receipts for services and shipments, excludes data for establishments primarily engaged in well-surveying and well-logging services. The total receipts for services by such establishments in 1939 was \$5,028 thousand.

TABLE 2A. General Statistics by Geographic Areas and Type of Operation: 1963 and 1958

(In general, contractors prepared one report for all oil and gas field services performed in the United States. These reports were classified on the basis of the principal kind of work and the principal State or district in which the service was performed)

Division, State, and type of operation <sup>1</sup>	1963												1958	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
INDUSTRY 1381.—DRILLING OIL AND GAS WELLS														
TOTAL.....	2,836	746	55,416	318,150	50,333	106,266	281,064	653,337	358,324	115,681	979,316	148,026	259,411	2587,440
<u>Division and State</u>														
Middle Atlantic, total.....	106	6	672	3,420	613	1,458	3,161	6,805	3,805	493	10,257	846	1,062	11,168
New York.....	18	-	94	540	81	180	468	933	415	26	1,279	95	71	483
Pennsylvania.....	88	6	578	2,880	532	1,278	2,693	5,872	3,390	467	8,978	751	991	10,685
East North Central.....	327	34	3,043	14,252	2,844	5,357	13,406	31,469	13,059	2,510	43,236	3,802	3,719	27,270
Ohio.....	110	9	824	4,267	759	1,559	4,008	9,730	4,044	910	13,613	1,071	808	5,287
Indiana.....	48	5	373	1,365	344	570	1,229	2,560	1,329	236	3,758	367	384	2,959
Illinois.....	127	16	1,254	5,273	1,173	2,263	4,946	11,118	5,169	853	15,602	1,538	(NA)	(NA)
Michigan.....	42	4	592	3,347	568	965	3,223	8,061	2,517	511	10,263	826	(NA)	(NA)
West North Central.....	242	39	2,753	13,539	2,420	4,795	11,402	33,423	15,876	2,871	46,482	5,688	3,356	31,384
North Dakota.....	10	4	207	1,136	186	458	1,052	3,465	1,203	92	3,837	923	528	6,585
Nebraska.....	20	4	227	1,236	196	362	998	3,553	1,974	311	5,333	505	239	2,437
Kansas.....	205	31	2,288	10,963	2,013	3,929	9,177	25,954	12,537	2,436	36,732	4,195	2,570	22,063
South Atlantic.....	129	13	1,090	5,171	992	2,146	4,593	10,805	5,655	1,058	15,977	1,541	929	5,300
West Virginia.....	125	13	1,059	5,027	965	2,093	4,471	10,516	5,359	1,058	15,423	1,510	901	5,041
East South Central.....	236	36	2,703	13,277	2,507	4,957	11,963	28,506	23,464	2,832	49,308	5,494	2,288	17,985
Kentucky.....	182	9	836	3,023	766	1,432	2,692	5,649	2,940	305	8,034	860	1,355	7,194
Alabama.....	8	3	244	1,441	232	575	1,343	3,494	5,414	515	8,770	653	58	347
Mississippi.....	42	24	1,612	8,791	1,498	2,928	7,906	19,291	15,079	2,012	32,411	3,971	865	10,398
West South Central.....	1,450	503	36,947	212,790	33,471	71,714	186,697	438,916	243,416	91,964	660,279	114,017	39,438	401,270
Arkansas.....	25	11	532	2,406	501	836	2,250	4,622	2,762	1,578	7,917	1,045	419	3,700
Louisiana, total.....	231	125	11,757	77,436	10,770	25,199	68,235	173,491	90,695	56,920	253,222	67,884	11,006	151,547
North Louisiana.....	90	36	1,965	9,777	1,819	3,667	8,735	21,749	11,557	3,106	32,286	4,126	(NA)	(NA)
South Louisiana.....	141	89	9,792	67,659	8,951	21,532	59,500	151,742	79,138	53,814	220,936	63,758	(NA)	(NA)
Oklahoma.....	303	89	5,654	28,720	5,100	10,376	24,861	53,974	33,516	8,381	84,253	11,618	6,595	55,596
Texas, total.....	891	278	19,004	104,228	17,100	35,303	91,351	206,829	116,443	25,085	314,887	33,470	21,418	190,427
Texas Gulf Coast A.....	107	47	2,911	17,192	2,551	5,385	14,635	29,475	15,799	5,118	43,906	6,486	(NA)	(NA)
Texas Gulf Coast B.....	52	18	1,017	5,882	940	2,031	5,284	11,444	6,045	1,103	17,030	1,562	(NA)	(NA)
South Texas.....	95	43	2,395	13,491	2,104	4,663	11,743	27,137	12,855	3,431	40,008	3,416	(NA)	(NA)
Southwest Texas.....	44	9	662	2,604	597	1,156	2,452	5,957	2,815	584	8,860	496	(NA)	(NA)
North Central Texas A.....	129	19	1,649	7,300	1,504	2,818	6,332	17,508	7,599	1,108	23,407	2,808	(NA)	(NA)
North Central Texas B.....	77	12	910	3,676	853	1,680	3,390	8,033	4,671	459	12,339	824	(NA)	(NA)
East Texas A.....	30	12	954	5,366	867	1,824	4,636	11,659	5,612	1,160	16,818	1,613	(NA)	(NA)
East Texas B.....	45	17	967	4,904	847	1,628	4,061	8,750	4,977	668	13,440	955	(NA)	(NA)
West Texas A.....	204	79	5,570	32,376	5,077	10,216	28,039	60,748	40,376	9,228	99,270	11,081	(NA)	(NA)
West Texas B.....	52	12	883	5,231	812	1,733	4,776	13,694	7,094	1,802	19,518	3,072	(NA)	(NA)
Texas Panhandle.....	56	10	1,086	6,206	988	2,169	5,703	12,424	8,600	424	20,291	1,157	(NA)	(NA)
Mountain, total.....	252	70	5,183	32,480	4,766	10,486	29,186	64,631	37,413	6,917	99,070	9,891	5,946	65,355
Montana.....	30	9	717	4,768	666	4,159	9,575	5,711	1,236	14,595	1,927	1,927	(NA)	(NA)
Wyoming.....	77	19	1,280	8,676	1,171	2,704	7,751	16,033	9,637	2,003	24,778	2,895	1,605	17,422
Colorado.....	47	6	479	2,845	409	936	2,408	7,021	2,749	539	9,464	845	1,009	9,740
New Mexico.....	84	30	2,248	13,470	2,107	4,257	12,532	26,313	15,571	2,839	40,936	3,787	2,114	23,865
Utah and Nevada.....	14	6	459	2,721	413	971	2,336	5,689	3,745	300	9,297	437	(NA)	(NA)
Pacific, total.....	94	45	3,025	23,221	2,720	5,353	20,656	38,782	15,636	7,036	54,707	6,747	2,673	227,708
Washington and Alaska.....	7	5	173	1,544	162	364	1,491	3,751	1,086	547	4,769	615	(NA)	(NA)
California.....	87	40	2,852	21,677	2,558	4,989	19,165	35,031	14,550	6,489	49,938	6,132	(NA)	(NA)
<u>Principal Type of Service and Geographic Area</u>														
United States, total.....	2,836	746	55,416	318,150	50,333	106,266	281,064	653,337	358,324	115,681	979,316	148,026	259,411	2587,440
Drilling oil, gas, dry, or service wells, total.....	2,218	586	44,967	267,044	40,803	87,680	235,467	551,594	332,487	101,484	853,908	131,657	52,713	539,108
With well operations.....	337	131	8,534	46,758	7,505	16,286	40,053	115,362	71,282	15,988	173,965	28,667	13,866	149,891
Without well operations.....	1,881	455	36,433	220,286	33,298	71,394	195,414	436,232	261,205	85,496	679,943	102,990	38,847	389,217
Drilling in, spudding in, and tailing in, total.....	179	27	2,056	11,495	1,863	3,780	10,048	23,691	8,293	1,688	31,190	2,482	(3)	(3)
With well operations.....	15	5	306	1,813	257	586	1,500	4,879	1,822	173	6,586	288	(3)	(3)
Without well operations.....	164	22	1,750	9,682	1,606	3,194	8,548	18,812	6,471	1,515	24,604	2,194	(3)	(3)
Reworking wells, total.....	438	133	8,393	39,611	7,667	14,806	35,549	78,052	17,544	12,509	94,218	13,887	36,698	348,332
With well operations.....	28	4	416	1,841	374	722	1,664	3,975	758	369	4,572	530	3945	36,806
Without well operations.....	410	129	7,977	37,770	7,293	14,084	33,885	74,077	16,786	12,140	89,646	13,357	35,753	341,526

See footnotes at end of table.

**TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Division, State, and type of operation <sup>1</sup>	1963												1958	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
INDUSTRY 1381.—DRILLING OIL AND GAS WELLS—Continued														
<u>Principal Type of Service and Geographic Area—Continued</u>														
Middle Atlantic, total.....	106	6	672	3,420	613	1,458	3,161	6,805	3,805	493	10,257	846	1,062	11,168
Drilling oil, gas, dry, or service wells, total.....	95	6	623	3,190	564	1,358	2,931	6,432	3,677	442	9,743	808	1,012	10,907
With well operations.....	15	4	260	1,522	247	607	1,449	3,338	2,307	144	5,478	311	188	2,582
Without well operations.....	80	2	363	1,668	317	751	1,482	3,094	1,370	298	4,265	497	824	8,325
Drilling in, spudding in, tailing in, and reworking wells.....	11	—	49	230	49	100	230	373	128	51	514	38	50	261
Pennsylvania.....	88	6	578	2,880	532	1,278	2,693	5,872	3,390	467	8,978	751	991	10,685
Drilling oil, gas, dry, or service wells, total.....	79	6	536	2,695	490	1,192	2,508	5,597	3,306	434	8,606	731	(NA)	(NA)
With well operations.....	13	4	232	1,380	229	574	1,369	3,075	2,234	144	5,179	274	(NA)	(NA)
Without well operations.....	66	2	304	1,315	261	618	1,139	2,522	1,072	290	3,427	457	764	7,958
East North Central, total.....	327	34	3,043	14,252	2,844	5,357	13,406	31,469	13,059	2,510	43,236	3,802	3,719	27,270
Drilling oil, gas, dry, or service wells, total.....	263	28	2,548	11,964	2,392	4,463	11,289	26,599	11,052	2,344	36,639	3,356	3,105	23,774
With well operations.....	48	8	555	2,597	503	1,063	2,355	5,309	3,314	733	8,418	938	1,121	9,717
Without well operations.....	215	20	1,993	9,367	1,889	3,400	8,934	21,290	7,738	1,611	28,221	2,418	1,984	14,057
Drilling in, spudding in, tailing in, and reworking wells, total.....	64	6	495	2,288	452	894	2,117	4,870	2,007	166	6,597	446	614	3,496
With well operations.....	7	1	85	292	77	133	268	1,041	775	12	1,715	113	45	347
Without well operations.....	57	5	410	1,996	375	761	1,849	3,829	1,232	154	4,882	333	569	3,149
Ohio, total.....	110	9	824	4,267	759	1,559	4,008	9,730	4,044	910	13,613	1,071	808	5,287
Drilling oil, gas, dry, or service wells, total.....	101	9	771	4,000	709	1,466	3,745	9,242	3,932	910	13,054	1,030	779	5,057
With well operations.....	23	3	223	1,121	195	448	988	2,131	1,589	403	3,759	364	177	1,323
Without well operations.....	78	6	548	2,879	514	1,018	2,757	7,111	2,343	507	9,295	666	602	3,734
Drilling in, spudding in, tailing in, and reworking wells (without well operations).....	9	—	53	267	50	93	263	488	112	—	559	41	29	230
Indiana, total.....	48	5	373	1,365	344	570	1,229	2,560	1,329	236	3,758	367	384	2,959
Drilling oil, gas, dry, or service wells, total.....	38	4	296	1,042	272	431	923	1,860	1,118	198	2,892	284	(NA)	(NA)
With well operations.....	7	—	35	215	28	65	172	561	114	24	660	39	(NA)	(NA)
Without well operations.....	31	4	261	827	244	366	751	1,299	1,004	174	2,232	245	226	1,902
Drilling in, spudding in, tailing in, and reworking wells.....	10	1	77	323	72	139	306	700	211	38	866	83	(NA)	(NA)
Illinois, total.....	127	16	1,254	5,273	1,173	2,263	4,946	11,118	5,169	853	15,602	1,538	(NA)	(NA)
Drilling oil, gas, dry, or service wells, total.....	91	11	927	3,812	873	1,659	3,577	8,425	4,261	728	12,067	1,347	1,462	11,499
With well operations.....	15	5	272	1,133	260	507	1,086	2,469	1,547	306	3,800	522	669	6,230
Without well operations.....	76	6	655	2,679	613	1,152	2,491	5,956	2,714	422	8,267	825	793	5,269
Drilling in, spudding in, tailing in, and reworking wells.....	36	5	327	1,461	300	604	1,369	2,693	908	125	3,535	191	(NA)	(NA)
Michigan, total.....	42	4	592	3,347	568	965	3,223	8,061	2,517	511	10,263	826	(NA)	(NA)
Drilling oil, gas, dry, or service wells.....	33	4	554	3,110	538	907	3,044	7,072	1,741	508	8,626	695	(NA)	(NA)
Without well operations.....	30	4	529	2,982	518	864	2,935	6,924	1,677	508	8,427	682	363	3,152
Drilling in, spudding in, tailing in, and reworking wells.....	9	—	38	237	30	58	179	989	776	3	1,637	131	(NA)	(NA)
West North Central, total.....	242	39	2,753	13,539	2,420	4,795	11,402	33,423	15,876	2,871	46,482	5,688	3,356	31,384
Drilling oil, gas, dry, or service wells, total.....	179	36	2,301	11,628	2,024	3,989	9,770	29,645	14,490	2,716	41,604	5,247	2,850	27,738
With well operations.....	36	15	992	4,825	823	1,650	3,748	16,852	5,677	1,444	20,782	3,191	1,039	11,423
Without well operations.....	143	21	1,309	6,803	1,201	2,339	6,022	12,793	8,813	1,272	20,822	2,056	1,811	16,315
Drilling in, spudding in, tailing in, and reworking wells.....	63	3	452	1,911	396	806	1,632	3,778	1,386	155	4,878	441	506	3,646
North Dakota.....	10	4	207	1,136	186	458	1,052	3,465	1,203	92	3,837	923	528	6,585
Drilling oil, gas, dry, or service wells.....	7	4	184	1,029	163	416	945	3,235	1,070	92	3,485	912	521	6,532
Nebraska.....	20	4	227	1,236	196	362	998	3,553	1,974	311	5,333	505	239	2,437
Drilling oil, gas, dry, or service wells, total.....	16	4	211	1,142	189	352	954	3,241	1,954	311	5,057	449	205	2,201
With well operations.....	4	1	90	391	89	171	384	2,044	756	101	2,586	315	104	1,559
Without well operations.....	12	3	121	751	100	181	570	1,197	1,198	210	2,471	134	101	642

See footnotes at end of table.

**TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Division, State, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
INDUSTRY 1381.—DRILLING OIL AND GAS WELLS—Continued														
<u>Principal Types of Services and Geographic Areas—Continued</u>														
West North Central—Continued														
Kansas, total.....	205	31	2,288	10,963	2,013	3,929	9,177	25,954	12,537	2,436	36,732	4,195	2,570	22,063
Drilling oil, gas, dry, or service wells, total.....	149	28	1,875	9,253	1,647	3,175	7,696	22,718	11,304	2,281	32,482	3,821	2,107	18,718
With well operations.....	31	13	805	4,017	651	1,237	2,972	12,910	4,518	1,310	16,677	2,061	745	7,599
Without well operations.....	118	15	1,070	5,236	996	1,938	4,724	9,808	6,786	971	15,805	1,760	1,362	11,119
Drilling in, spudding in, tailing in, and reworking wells.....	56	3	413	1,710	366	754	1,481	3,236	1,233	155	4,250	374	463	3,345
South Atlantic, total.....	129	13	1,090	5,171	992	2,146	4,593	10,805	5,655	1,058	15,977	1,541	929	5,300
Drilling oil, gas, dry, or service wells, total.....	114	13	992	4,813	907	1,971	4,266	10,037	5,265	995	14,861	1,436	916	5,212
With well operations.....	6	1	113	560	94	238	428	1,851	883	11	2,696	49	183	832
Without well operations.....	108	12	879	4,253	813	1,733	3,838	8,186	4,382	984	12,165	1,387	733	4,380
Drilling in, spudding in, tailing in, and reworking wells.....	15	-	98	358	85	175	327	768	390	63	1,116	105	13	88
East South Central, total.....	236	36	2,703	13,277	2,507	4,957	11,963	28,506	23,464	2,832	49,308	5,494	2,288	17,985
Drilling oil, gas, dry, or service wells, total.....	203	26	2,058	10,722	1,888	3,928	9,478	23,680	22,061	1,962	43,195	4,508	2,174	17,395
With well operations.....	23	7	406	2,008	364	828	1,781	7,102	8,430	782	13,979	2,335	644	7,572
Without well operations.....	180	19	1,652	8,714	1,524	3,100	7,697	16,578	13,631	1,180	29,216	2,173	1,530	9,823
Drilling in, spudding in, tailing in, and reworking wells.....	33	10	645	2,555	619	1,029	2,485	4,826	1,403	870	6,113	986	114	590
Kentucky.....	182	9	836	3,023	766	1,432	2,692	5,649	2,940	305	8,034	860	1,355	7,194
Drilling oil, gas, dry, or service wells:														
Without well operations.....	149	4	570	2,103	531	1,021	1,923	3,824	2,153	177	5,673	481	996	5,355
Mississippi, total.....	42	24	1,612	8,791	1,498	2,928	7,906	19,291	15,079	2,012	32,411	3,971	865	10,398
Drilling oil, gas, dry, or service wells.....	25	15	1,052	6,582	953	2,040	5,730	15,119	13,921	1,172	27,134	3,078	(NA)	(NA)
Drilling in, spudding in, tailing in, and reworking wells (without well operations).....	17	9	560	2,209	545	888	2,176	4,172	1,158	840	5,277	893	(NA)	(NA)
West South Central, total.....	1,450	503	36,947	212,790	33,471	71,714	186,697	438,916	243,416	91,964	660,279	114,017	39,438	401,270
Drilling oil, gas, dry, or service wells, total.....	1,086	382	29,697	178,245	26,956	59,142	156,235	370,247	227,010	81,785	576,409	102,633	34,969	369,464
With well operations.....	177	82	5,368	30,551	4,729	10,479	26,388	70,521	45,603	11,375	107,465	20,034	9,701	107,220
Without well operations.....	909	300	24,329	147,694	22,227	48,663	129,847	299,726	181,407	70,410	468,944	82,599	25,268	262,244
Drilling in, spudding in, tailing in, and reworking wells, total.....	364	121	7,250	34,545	6,515	12,572	30,462	68,669	16,406	10,179	83,870	11,384	4,469	31,806
With well operations.....	25	6	456	2,361	403	844	2,102	6,532	1,136	465	7,520	613	761	5,472
Without well operations.....	338	115	6,794	32,184	6,112	11,728	28,360	62,137	15,270	9,714	76,350	10,771	3,708	26,334
Arkansas, total.....	25	11	532	2,406	501	836	2,250	4,622	2,762	1,578	7,917	1,045	419	3,700
Drilling oil, gas, dry, or service wells.....	18	9	372	1,696	349	595	1,565	3,344	2,362	1,287	6,276	717	(NA)	(NA)
Drilling in, spudding in, tailing in, and reworking wells (without well operations).....	7	2	160	710	152	241	685	1,278	400	291	1,641	328	(NA)	(NA)
Louisiana, total.....	231	125	11,757	77,436	10,770	25,199	68,235	173,491	90,695	56,920	253,222	67,884	11,006	151,547
Drilling oil, gas, dry, or service wells, total.....	176	98	10,279	69,088	9,360	21,954	60,483	156,859	85,695	53,765	231,800	64,519	10,307	145,510
With well operations.....	26	18	1,066	6,572	992	2,449	6,062	15,069	13,189	3,126	25,068	6,316	1,402	19,732
Without well operations.....	150	80	9,213	62,516	8,368	19,505	54,421	141,790	72,506	50,639	206,732	58,203	8,905	125,778
Drilling in, spudding in, tailing in, and reworking wells.....	55	27	1,478	8,348	1,410	3,245	7,752	16,632	5,000	3,155	21,422	3,365	699	6,037
North Louisiana, total.....	90	36	1,965	9,777	1,819	3,667	8,735	21,749	11,557	3,106	32,286	4,126	(NA)	(NA)
Drilling oil, gas, dry, or service wells, total.....	75	33	1,807	8,770	1,669	3,315	7,852	19,710	10,792	2,912	29,570	3,844	(NA)	(NA)
With well operations.....	16	10	530	3,026	484	1,221	2,707	7,805	4,365	1,364	11,509	2,025	(NA)	(NA)
Without well operations.....	59	23	1,277	5,744	1,185	2,094	5,145	11,905	6,427	1,548	18,061	1,819	(NA)	(NA)
Drilling in, spudding in, tailing in, and reworking wells.....	15	3	158	1,007	150	352	883	2,039	765	194	2,716	282	(NA)	(NA)
South Louisiana, total.....	141	89	9,792	67,659	8,951	21,532	59,500	151,742	79,138	53,814	220,936	63,758	(NA)	(NA)
Drilling oil, gas, dry, or service wells, total.....	101	65	8,472	60,318	7,691	18,639	52,631	137,149	74,903	50,853	202,230	60,675	(NA)	(NA)
With well operations.....	10	8	536	3,546	508	1,228	3,355	7,264	8,824	1,762	13,559	4,291	(NA)	(NA)
Without well operations.....	91	57	7,936	56,772	7,183	17,411	49,276	129,885	66,079	49,091	188,671	56,384	(NA)	(NA)
Drilling in, spudding in, tailing in, and reworking wells.....	40	24	1,320	7,341	1,260	2,893	6,869	14,593	4,235	2,961	18,706	3,083	(NA)	(NA)

See footnotes at end of table.

**TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Division, State, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
INDUSTRY 1381.—DRILLING OIL AND GAS WELLS—Continued														
Principal Types of Services and Geographic Areas—Continued														
West South Central—Continued														
Oklahoma, total.....	303	89	5,654	28,720	5,100	10,376	24,861	53,974	33,516	8,381	84,253	11,618	6,595	55,596
Drilling oil, gas, dry, or service wells.....	242	69	4,420	23,225	3,958	8,407	19,836	42,959	31,348	6,327	71,293	9,341	(NA)	(NA)
Drilling in, spudding in, tailing in, and reworking wells.....	61	20	1,234	5,495	1,142	1,969	5,025	11,015	2,168	2,054	12,960	2,277	(NA)	(NA)
Texas, total.....	891	278	19,004	104,228	17,100	35,303	91,351	206,829	116,443	25,085	314,887	33,470	21,418	190,427
Drilling oil, gas, dry, or service wells, total.....	650	206	14,626	84,236	13,289	28,186	74,351	167,085	107,605	20,406	267,040	28,056	18,598	170,583
With well operations.....	106	42	2,840	16,062	2,430	5,128	13,575	37,145	20,212	5,292	54,585	8,064	5,761	60,461
Without well operations.....	544	164	11,786	68,174	10,859	23,058	60,776	129,940	87,393	15,114	212,455	19,992	12,837	110,122
Drilling in, spudding in, tailing in, and reworking wells, total.....	241	72	4,378	19,992	3,811	7,117	17,000	39,744	8,838	4,679	47,847	5,414	2,820	19,844
With well operations.....	18	4	313	1,670	273	630	1,456	4,701	888	351	5,679	261	514	3,730
Without well operations.....	223	68	4,065	18,322	3,538	6,487	15,544	35,043	7,950	4,328	42,168	5,153	2,306	16,114
Texas Gulf Coast A, total.....	107	47	2,911	17,192	2,551	5,385	14,635	29,475	15,799	5,118	43,906	6,486	(NA)	(NA)
Drilling oil, gas, dry, or service wells, total.....	60	29	1,879	12,065	1,599	3,455	9,868	18,202	13,416	3,456	30,466	4,608	(NA)	(NA)
With well operations.....	11	7	384	2,409	334	645	2,050	2,549	5,181	1,873	7,364	2,239	(NA)	(NA)
Without well operations.....	49	22	1,495	9,656	1,265	2,810	7,818	15,653	8,235	1,583	23,102	2,369	(NA)	(NA)
Drilling in, spudding in, tailing in, and reworking wells.....	47	18	1,032	5,127	952	1,930	4,767	11,273	2,383	1,662	13,440	1,878	(NA)	(NA)
Texas Gulf Coast B, total.....	52	18	1,017	5,882	940	2,031	5,284	11,444	6,045	1,103	17,030	1,562	(NA)	(NA)
Drilling oil, gas, dry, or service wells, total.....	29	11	639	4,060	582	1,254	3,576	7,716	5,361	772	12,707	1,142	(NA)	(NA)
With well operations.....	9	2	204	1,406	184	452	1,261	2,500	2,887	491	5,203	675	(NA)	(NA)
Without well operations.....	20	9	435	2,654	398	802	2,315	5,216	2,474	281	7,504	467	(NA)	(NA)
Drilling in, spudding in, tailing in, and reworking wells.....	23	7	378	1,822	358	777	1,708	3,728	684	331	4,323	420	(NA)	(NA)
South Texas, total.....	95	43	2,395	13,491	2,104	4,663	11,743	27,138	12,855	3,431	40,008	3,416	(NA)	(NA)
Drilling oil, gas, dry, or service wells, total.....	63	28	1,770	10,689	1,580	3,729	9,663	21,459	11,662	2,833	33,173	2,781	(NA)	(NA)
With well operations.....	10	6	246	1,351	211	499	1,238	2,846	1,192	227	4,018	247	(NA)	(NA)
Without well operations.....	53	22	1,524	9,338	1,369	3,230	8,425	18,613	10,470	2,606	29,155	2,534	(NA)	(NA)
Drilling in, spudding in, tailing in, and reworking wells.....	32	15	625	2,802	524	934	2,080	5,679	1,193	598	6,835	635	(NA)	(NA)
Southwest Texas, total.....	44	9	662	2,604	557	1,156	2,452	5,957	2,815	584	8,860	496	(NA)	(NA)
Drilling oil, gas, dry, or service wells.....	34	7	498	2,312	469	979	2,243	5,479	2,643	540	8,215	447	(NA)	(NA)
Drilling in, spudding in, tailing in, and reworking wells.....	10	2	164	292	88	177	209	478	172	44	645	49	(NA)	(NA)
North Central Texas A, total.....	129	19	1,649	7,300	1,504	2,818	6,632	17,508	7,599	1,108	23,407	2,808	(NA)	(NA)
Drilling oil, gas, dry, or service wells, total.....	101	17	1,425	6,548	1,310	2,493	6,023	16,002	7,103	902	21,423	2,584	(NA)	(NA)
With well operations.....	19	5	436	1,827	391	606	1,762	5,010	1,711	391	6,297	815	(NA)	(NA)
Without well operations.....	82	12	989	4,721	919	1,887	4,261	10,992	5,392	511	15,126	1,769	(NA)	(NA)
Drilling in, spudding in, tailing in, and reworking wells, total.....	28	2	224	752	194	325	609	1,506	496	206	1,984	224	(NA)	(NA)
With well operations.....	6	-	56	251	43	81	177	554	156	55	703	62	(NA)	(NA)
Without well operations.....	22	2	168	501	151	244	432	952	340	151	1,281	162	(NA)	(NA)
North Central Texas B, total.....	77	12	910	3,676	853	1,680	3,390	8,033	4,671	459	12,339	824	(NA)	(NA)
Drilling oil, gas, dry, or service wells, total.....	66	11	778	3,219	731	1,429	2,970	7,094	4,519	450	11,275	788	(NA)	(NA)
With well operations.....	14	3	244	1,170	219	481	1,047	2,383	1,735	234	4,023	329	(NA)	(NA)
Without well operations.....	52	8	534	2,049	512	948	1,923	4,711	2,784	216	7,252	459	(NA)	(NA)
Drilling in, spudding in, tailing in, and reworking wells (without well operations).....	11	1	132	457	122	251	420	939	152	9	1,064	36	(NA)	(NA)
East Texas A, total.....	30	12	954	5,366	867	1,824	4,636	11,659	5,612	1,160	16,818	1,613	(NA)	(NA)
Drilling oil, gas, dry, or service wells:														
Without well operations.....	20	6	297	1,753	275	613	1,612	3,501	2,409	348	5,646	701	(NA)	(NA)
East Texas B, total.....	45	17	967	4,904	847	1,628	4,061	8,000	4,977	668	13,440	955	(NA)	(NA)
Drilling oil, gas, dry, or service wells, total.....	35	14	807	4,267	692	1,330	3,451	7,500	4,709	540	11,919	859	(NA)	(NA)
With well operations.....	3	1	160	1,206	76	228	566	1,137	294	90	1,809	162	(NA)	(NA)
Without well operations.....	32	13	647	3,061	616	1,102	2,885	5,363	4,415	450	10,110	697	(NA)	(NA)
Drilling in, spudding in, tailing in, and reworking wells.....	10	3	160	637	155	298	610	1,211	268	128	1,521	96	(NA)	(NA)

See footnotes at end of table.



TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Division, State, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
INDUSTRY 1381.—DRILLING OIL AND GAS WELLS—Continued														
<u>Principal Types of Services and Geographic Areas—Continued</u>														
West South Central—Continued														
Texas—Continued														
West Texas A, total.....	204	79	5,570	32,376	5,077	10,216	28,039	60,747	40,376	9,228	99,270	11,081	(NA)	(NA)
Drilling oil, gas, dry, or service wells, total.....	159	61	4,626	27,854	4,286	8,978	24,497	52,671	38,990	8,348	89,956	10,053	(NA)	(NA)
With well operations.....	13	7	382	2,213	318	683	1,778	6,686	2,588	733	8,860	1,147	(NA)	(NA)
Without well operations.....	146	54	4,244	25,641	3,968	8,295	22,719	45,985	36,402	7,615	81,096	8,906	(NA)	(NA)
Drilling in, spudding in, tailing in, and reworking wells.....	45	18	944	4,522	791	1,238	3,542	8,076	1,386	880	9,314	1,028	(NA)	(NA)
West Texas B, total.....	52	12	883	5,231	812	1,733	4,776	13,694	7,094	1,802	19,518	3,072	(NA)	(NA)
Drilling oil, gas, dry, or service wells, total.....	40	11	696	4,326	664	1,387	4,072	12,516	6,746	1,460	18,025	2,697	(NA)	(NA)
With well operations.....	11	4	171	1,080	156	389	1,011	4,222	1,625	603	4,907	1,543	(NA)	(NA)
Without well operations.....	29	7	525	3,246	508	998	3,061	8,294	5,121	857	13,118	1,154	(NA)	(NA)
Drilling in, spudding in, tailing in, and reworking wells.....	12	1	187	905	148	346	704	1,178	348	342	1,493	375	(NA)	(NA)
Texas Panhandle, total.....	56	10	1,086	6,206	988	2,169	5,703	12,424	8,600	424	20,291	1,157	(NA)	(NA)
Drilling oil, gas, dry, or service wells, total.....	36	7	831	4,938	766	1,865	4,635	9,661	8,154	303	17,156	962	(NA)	(NA)
With well operations.....	5	2	147	643	120	276	569	2,448	548	176	2,787	385	(NA)	(NA)
Without well operations.....	31	5	684	4,295	646	1,589	4,066	7,213	7,606	127	14,369	577	(NA)	(NA)
Drilling in, spudding in, tailing in, and reworking wells.....	20	3	255	1,268	222	304	1,068	2,763	446	121	3,135	195	(NA)	(NA)
Mountain, total.....	252	70	5,183	32,480	4,766	10,486	29,186	64,631	37,413	6,917	99,070	9,891	5,946	65,355
Drilling oil, gas, dry, or service wells, total.....	202	56	4,277	27,656	3,924	8,759	25,149	54,945	35,214	5,386	87,321	8,224	5,299	59,165
With well operations.....	27	10	613	3,269	574	1,122	3,034	8,679	4,485	1,320	12,883	1,601	779	9,063
Without well operations.....	175	46	3,664	24,387	3,350	7,637	22,115	46,266	30,729	4,066	74,438	6,623	4,520	50,102
Drilling in, spudding in, tailing in, and reworking wells (without well operations).....	50	14	906	4,824	842	1,727	4,037	9,686	2,199	1,531	11,749	1,667	647	6,190
Montana, total.....	30	9	717	4,768	666	1,618	4,159	9,575	5,711	1,236	14,595	1,927	(NA)	(NA)
Drilling oil, gas, dry, or service wells.....	22	6	559	3,745	524	1,288	3,559	7,788	5,184	809	12,292	1,489	(NA)	(NA)
Drilling in, spudding in, tailing in, and reworking wells (without well operations).....	8	3	158	1,023	142	330	600	1,787	527	427	2,303	438	(NA)	(NA)
Wyoming, total.....	77	19	1,280	8,676	1,171	2,704	7,751	16,033	9,637	2,003	24,778	2,895	1,605	17,422
Drilling oil, gas, dry, or service wells, total.....	61	17	1,142	7,631	1,045	2,399	6,836	14,155	9,022	1,805	22,251	2,731	1,504	16,525
With well operations.....	4	1	84	532	79	170	500	846	507	216	1,268	301	95	1,519
Without well operations.....	57	16	1,058	7,099	966	2,229	6,336	13,309	8,515	1,589	20,983	2,430	1,409	15,006
Drilling in, spudding in, tailing in, and reworking wells (without well operations).....	16	2	138	1,045	126	305	915	1,878	615	198	2,527	164	101	897
Colorado, total.....	47	6	479	2,845	409	936	2,408	7,021	2,749	539	9,464	845	1,009	9,740
Drilling oil, gas, dry, or service wells, total.....	38	4	356	2,077	295	665	1,686	5,401	2,462	324	7,596	591	866	8,687
With well operations.....	7	2	137	975	116	324	811	2,780	1,288	175	4,035	208	162	1,043
Without well operations.....	31	2	219	1,102	179	341	875	2,621	1,174	149	3,561	383	704	7,644
Drilling in, spudding in, tailing in, and reworking wells (without well operations).....	9	2	123	768	114	271	722	1,620	287	215	1,868	254	143	1,053
New Mexico, total.....	84	30	2,248	13,470	2,107	4,257	12,532	26,313	15,571	2,839	40,936	3,787	2,114	23,865
Drilling oil, gas, dry, or service wells, total.....	68	23	1,761	11,484	1,647	3,436	10,734	21,968	14,803	2,148	35,938	2,981	1,720	19,725
With well operations.....	12	5	305	1,585	301	564	1,576	3,758	2,425	740	5,910	1,013	493	6,104
Without well operations.....	56	18	1,456	9,899	1,346	2,872	9,158	18,210	12,378	1,408	30,028	1,968	1,227	13,621
Drilling in, spudding in, tailing in, and reworking wells (without well operations).....	16	7	487	1,986	460	821	1,798	4,345	768	691	4,998	806	394	4,140
Pacific, total.....	94	45	3,025	23,221	2,720	5,353	20,656	38,782	15,636	7,036	54,707	6,747	<sup>2</sup> 2,673	<sup>2</sup> 27,708
Drilling oil, gas, dry, or service wells.....	75	39	2,384	18,107	2,144	4,082	16,335	29,971	13,709	5,854	44,089	5,445	<sup>2</sup> 2,388	<sup>2</sup> 25,453
Drilling in, spudding in, tailing in, and reworking wells.....	19	6	641	5,114	576	1,271	4,321	8,811	1,927	1,182	10,618	1,302	<sup>2</sup> 285	<sup>2</sup> 2,255

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Division, State, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
INDUSTRY 1382.—OIL AND GAS EXPLORATION SERVICES														
TOTAL.....	373	68	8,683	47,828	7,232	16,246	36,915	89,988	31,498	10,064	119,824	11,726	29,557	264,353
<u>Division and State</u>														
Middle Atlantic and East North Central.....	17	1	99	483	82	154	392	794	458	-	1,185	67	106	901
West North Central (Kansas for 1963).....	17	3	256	1,318	196	441	954	2,076	1,916	83	3,792	283	212	1,874
South Atlantic and East South Central.....	26	3	359	1,400	344	673	1,295	2,104	1,266	176	3,300	246	862	3,714
Mississippi.....	10	3	326	1,161	314	620	1,076	1,757	1,087	144	2,781	207	847	3,573
West South Central.....	212	47	6,369	35,731	5,261	12,468	27,221	60,606	20,439	6,831	79,728	8,148	7,364	48,044
Louisiana, total.....	35	13	1,610	9,349	1,405	3,063	7,494	17,085	4,985	1,312	21,644	1,738	3,396	18,973
North Louisiana.....	4	1	44	209	38	99	157	566	9	2	571	3	(NA)	(NA)
South Louisiana.....	31	12	1,566	9,140	1,367	2,964	7,337	16,519	4,976	1,310	21,073	1,735	(NA)	(NA)
Oklahoma.....	28	7	675	3,761	510	1,278	2,583	7,407	1,864	924	9,060	1,135	381	2,686
Texas.....	144	27	4,075	22,586	3,338	8,109	17,112	36,056	13,574	4,595	48,954	5,271	3,581	26,228
Texas Gulf Coast A.....	26	5	1,265	7,968	947	2,389	4,933	10,001	3,223	1,535	13,109	1,650	(NA)	(NA)
South Texas.....	4	3	325	1,590	218	545	1,113	2,006	532	652	2,730	460	(NA)	(NA)
Southwest Texas.....	11	2	309	1,742	235	597	1,105	2,428	1,059	247	3,181	553	(NA)	(NA)
East Texas A.....	37	7	1,164	6,486	1,109	2,600	6,067	12,707	5,805	1,173	18,325	1,360	(NA)	(NA)
East Texas B.....	10	3	303	1,411	262	678	1,060	2,265	455	398	2,711	407	(NA)	(NA)
West Texas A.....	31	7	682	3,525	511	1,170	2,567	5,863	2,031	570	7,685	779	(NA)	(NA)
Mountain.....	81	8	614	2,819	506	1,119	2,466	6,347	3,569	601	9,647	870	810	8,167
Wyoming.....	27	3	182	836	166	303	693	2,441	1,852	212	4,149	350	203	1,861
Colorado.....	20	1	108	602	101	240	579	1,303	388	270	1,709	252	(NA)	(NA)
New Mexico.....	13	2	180	835	133	347	739	1,274	898	52	2,172	52	415	4,475
Pacific, total.....	20	6	986	6,077	843	1,391	4,587	18,061	3,850	2,373	22,172	2,112	2203	21,653
Washington and Alaska.....	5	3	295	2,243	271	514	2,010	6,588	2,046	413	8,365	682	(NA)	(NA)
California.....	15	3	691	3,834	572	877	2,577	11,473	1,804	1,960	13,807	1,430	(NA)	(NA)
<u>Principal Type of Service and Geographic Area</u>														
United States, total.....	373	68	8,683	47,828	7,232	16,246	36,915	89,988	31,498	10,064	119,824	11,726	29,557	264,353
Geophysical exploration.....	299	64	8,263	45,084	6,867	15,364	34,514	81,853	28,632	9,239	109,039	10,685	9,183	60,671
Without well operations.....	295	64	8,255	45,021	6,863	15,355	34,479	81,706	28,575	9,239	108,859	10,661	(NA)	(NA)
Other exploration <sup>4</sup> .....	74	4	420	2,744	365	882	2,401	8,135	2,866	825	10,785	1,041	374	3,682
Middle Atlantic and East North Central, total.....	17	1	99	483	82	154	392	794	458	-	1,185	67	106	901
Geophysical exploration (without well operations).....	12	1	84	355	67	121	264	543	145	-	629	59	(NA)	(NA)
Other exploration (without well operations).....	5	-	15	128	15	33	128	251	313	-	556	8	(NA)	(NA)
West North Central (Kansas for 1963).....	17	3	256	1,318	196	441	954	2,076	1,916	83	3,792	283	212	1,874
Geophysical exploration.....	11	3	224	1,168	167	368	821	1,751	1,763	49	3,440	123	196	1,691
South Atlantic and East South Central.....	26	3	359	1,400	344	673	1,295	2,104	1,266	176	3,300	246	862	3,714
Geophysical exploration.....	20	3	348	1,325	333	649	1,220	1,925	1,207	169	3,059	242	(NA)	(NA)
Mississippi (geophysical exploration, without well operations).....	10	3	326	1,161	314	620	1,076	1,757	1,087	144	2,781	207	847	3,573
West South Central, total.....	212	47	6,369	35,731	5,261	12,468	27,221	60,606	20,439	6,831	79,728	8,148	7,364	48,044
Geophysical exploration.....	177	45	6,228	35,046	5,136	12,172	26,622	59,124	19,643	6,760	77,474	8,053	7,164	46,045
Other exploration.....	35	2	141	685	125	296	599	1,482	796	71	2,254	95	200	1,999
Louisiana.....	35	13	1,610	9,349	1,405	3,063	7,494	17,085	4,985	1,312	21,644	1,738	3,396	18,973
Geophysical exploration (without well operations).....	30	12	1,576	9,131	1,375	2,998	7,298	16,673	4,963	1,308	21,238	1,706	3,396	18,973
Texas, total.....	144	27	4,075	22,586	3,338	8,109	17,112	36,056	13,574	4,595	48,954	5,271	3,581	26,228
Geophysical exploration.....	119	26	3,972	22,143	3,245	7,886	16,733	35,040	12,816	4,528	47,173	5,211	3,391	24,399
Other exploration.....	25	1	103	443	93	223	379	1,016	758	67	1,781	60	190	1,829
Texas Gulf Coast A, total.....	26	5	1,265	7,968	947	2,389	4,933	10,001	3,223	1,535	13,109	1,650	(NA)	(NA)
Geophysical exploration.....	19	4	1,192	7,633	881	2,224	4,697	9,372	2,691	1,498	11,945	1,616	(NA)	(NA)
Other exploration.....	7	1	73	335	66	165	276	629	532	37	1,164	34	(NA)	(NA)
South Texas (geophysical exploration, without well operations).....	4	3	325	1,590	218	545	1,113	2,006	532	652	2,730	460	(NA)	(NA)
East Texas A.....	37	7	1,164	6,486	1,109	2,600	6,067	12,707	5,805	1,173	18,325	1,360	(NA)	(NA)
Geophysical exploration (without well operations).....	30	7	1,152	6,447	1,098	2,576	6,028	12,569	5,796	1,156	18,161	1,360	(NA)	(NA)

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Division, State, and type of operation <sup>1</sup>	1963												1958	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
INDUSTRY 1382.—OIL AND GAS EXPLORATION SERVICES—Continued														
<u>Principal Type of Service and Geographic Area—Continued</u>														
West, total.....	101	14	1,600	8,896	1,349	2,510	7,053	24,408	7,419	2,974	31,819	2,982	<sup>2</sup> 1,013	<sup>2</sup> 9,820
Geophysical exploration (without well operations).....	64	7	516	2,300	425	918	2,010	4,420	2,574	301	6,782	513	(NA)	(NA)
Other exploration (without well operations).....	17	1	98	519	81	201	456	1,927	995	300	2,865	357	(NA)	(NA)
Wyoming, total.....	27	3	182	836	166	303	693	2,441	1,852	212	4,149	356	203	1,861
Geophysical exploration (without well operations).....	21	3	163	692	152	271	607	1,424	1,140	131	2,457	238	(NA)	(NA)
Other exploration (without well operations).....	6	-	19	144	14	32	86	1,017	712	81	1,692	118	(NA)	(NA)
Colorado, total.....	20	1	108	602	101	240	579	1,303	388	270	1,709	252	(NA)	(NA)
Geophysical exploration (without well operations).....	16	1	70	394	63	151	371	865	236	94	1,120	75	(NA)	(NA)
Other exploration (without well operations).....	4	-	38	208	38	89	208	438	152	176	589	177	(NA)	(NA)
New Mexico.....	13	2	180	835	133	347	739	1,274	898	52	2,172	52	415	4,475
Geophysical exploration (without well operations).....	10	2	173	810	127	334	717	1,214	886	37	2,092	45	(NA)	(NA)
INDUSTRY 1389.—OIL AND GAS FIELD SERVICES, N.E.C.														
TOTAL.....	3,003	434	48,274	265,749	39,028	84,076	199,414	498,029	226,869	62,010	718,754	68,154	<sup>2</sup> 47,278	<sup>2</sup> 455,994
<u>Division and State</u>														
Middle Atlantic.....	72	2	312	1,239	281	582	1,060	2,369	772	168	3,123	186	3,261	23,241
North Central.....	545	39	3,846	15,948	3,283	6,400	13,185	32,318	9,549	3,254	41,358	3,763		
Ohio.....	40	-	129	352	110	223	308	769	480	78	1,245	82		
Indiana.....	18	-	70	248	62	127	221	546	143	61	685	65		
Nebraska.....	32	3	252	1,261	185	370	888	2,656	(D)	490	3,227	(D)		
Kansas.....	278	21	1,984	7,925	1,753	3,417	6,804	16,077	4,941	1,691	20,806	1,903		
South Atlantic and East South Central.....	133	12	1,148	4,218	1,033	1,992	3,776	9,333	2,497	1,782	11,658	1,954	1,066	6,580
Mississippi.....	46	6	497	1,744	433	777	1,529	4,279	1,002	488	5,198	571	609	4,005
West South Central, total.....	1,741	308	37,221	212,584	29,557	65,260	155,131	396,454	198,006	50,605	589,325	55,740	38,860	387,856
Arkansas.....	37	4	357	1,190	326	611	1,050	2,370	519	225	2,877	237	271	1,863
Louisiana, total.....	271	73	10,506	66,033	8,368	18,155	45,868	104,582	64,493	14,080	166,695	16,460	6,256	49,750
North Louisiana.....	72	9	586	2,289	518	1,073	2,072	4,808	1,788	1,021	6,411	1,206	(NA)	(NA)
South Louisiana.....	199	64	9,920	63,744	7,850	17,082	43,796	99,774	62,705	13,059	160,284	15,254	(NA)	(NA)
Oklahoma.....	351	46	4,323	19,655	3,085	5,367	11,670	26,665	7,198	2,570	33,560	2,873	3,734	21,687
Texas, total.....	1,082	185	22,035	125,706	17,778	41,127	96,543	262,837	125,796	33,730	386,193	36,170	28,599	314,556
Texas Gulf Coast A.....	174	30	2,704	14,044	1,950	3,900	9,040	28,642	9,632	2,765	37,723	3,316	(NA)	(NA)
Texas Gulf Coast B.....	41	7	453	1,543	382	714	1,249	2,903	1,361	236	4,047	453	(NA)	(NA)
South Texas.....	107	10	968	3,797	772	1,712	3,193	8,945	2,889	1,120	11,623	1,331	(NA)	(NA)
Southwest Texas.....	30	4	227	658	188	372	524	1,327	375	93	1,680	115	(NA)	(NA)
North Central Texas A.....	115	13	945	3,203	793	1,538	2,739	5,964	2,170	255	7,986	403	(NA)	(NA)
North Central Texas B.....	81	5	522	2,148	463	1,104	1,882	4,861	1,171	311	5,701	642	(NA)	(NA)
East Texas A.....	20	3	445	2,756	364	737	2,324	4,346	717	235	5,046	252	(NA)	(NA)
East Texas B.....	102	17	1,280	5,603	1,124	2,327	5,029	11,359	3,484	1,076	14,695	1,224	(NA)	(NA)
West Texas A.....	291	76	13,094	85,508	10,530	25,916	64,726	183,352	100,388	25,581	282,574	26,747	(NA)	(NA)
West Texas B.....	36	5	460	1,874	379	804	1,655	3,033	716	214	3,621	342	(NA)	(NA)
Texas Panhandle.....	85	15	937	4,572	833	2,003	4,182	8,105	2,893	1,844	11,497	1,345	(NA)	(NA)
Mountain.....	325	40	3,123	14,520	2,733	5,707	12,731	28,944	7,284	3,836	36,376	3,688	2,174	19,149
Montana.....	35	5	346	1,369	257	602	1,235	2,453	544	104	2,991	110	(NA)	(NA)
Wyoming.....	85	9	676	3,647	570	1,241	3,142	8,001	2,097	702	9,888	912	325	3,300
Colorado.....	45	2	222	1,219	194	417	1,048	2,415	581	456	3,083	369	350	3,199
New Mexico, total.....	134	20	1,562	6,563	1,414	2,769	5,682	13,012	3,267	1,893	16,314	1,858	1,125	9,604
West New Mexico.....	28	-	164	819	133	294	646	1,641	544	260	2,201	244	(NA)	(NA)
East New Mexico.....	106	19	1,398	5,744	1,281	2,475	5,036	11,371	2,723	1,633	14,113	1,614	(NA)	(NA)
Utah.....	23	4	298	1,670	281	646	1,577	2,977	753	681	3,978	433	207	1,555
Pacific, total.....	187	33	2,624	17,240	2,141	4,135	13,531	28,611	8,761	2,365	36,914	2,823	<sup>2</sup> 1,917	<sup>2</sup> 19,168
Washington and Alaska.....	6	1	64	604	59	132	500	1,370	136	91	1,397	200	(NA)	(NA)
California.....	181	32	2,560	16,636	2,082	4,003	13,031	27,241	8,625	2,274	35,517	2,623	1,917	19,168

See footnotes at end of table.

**TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Division, State, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
INDUSTRY 1389.—OIL AND GAS FIELD SERVICES, N.E.C.—Continued														
<u>Principal Type of Service and Geographic Area</u>														
United States, total.....	3,003	434	48,274	265,749	39,028	84,076	199,414	498,029	226,869	62,010	718,754	68,154	247,278	2455,994
Well surveying and well logging and cementing wells <sup>2</sup> .....	268	29	11,138	81,805	8,251	20,584	55,201	173,821	73,379	22,134	245,335	23,999	12,081	167,391
Building (erecting), repairing, or dismantling rigs and derricks (without well operations).....	56	11	799	3,187	648	933	2,385	4,147	1,196	199	5,257	285	1,014	7,159
Excavating slush pits and cellars (without well operations).....	56	9	630	2,765	517	1,110	2,281	5,730	1,837	984	7,771	780	654	5,881
Running, cutting, and pulling casing, tubes and rods, total.....	506	87	5,900	25,730	5,298	10,657	22,323	52,557	13,149	6,595	65,323	6,978	7,106	48,763
With well operations.....	21	8	377	1,735	341	713	1,625	3,276	687	273	3,790	446	480	3,412
Without well operations.....	485	79	5,523	23,995	4,957	9,944	20,698	49,281	12,462	6,322	61,533	6,532	6,626	45,351
Perforating well casing (without well operations).....	61	9	1,582	10,909	866	2,474	5,590	24,206	6,154	2,252	29,057	3,555	4,100	48,507
Acidizing and other chemical treatment of wells (without well operations).....	70	10	3,761	26,990	2,772	7,671	18,876	48,061	49,901	9,189	99,008	8,143	3,705	44,668
Cleaning out, bailing out, or swabbing wells, total.....	273	41	2,786	11,370	2,401	4,639	10,014	22,101	4,433	2,956	26,440	3,050	3,888	29,734
With well operations.....	12	1	97	332	94	145	323	936	143	118	1,100	97	296	2,102
Without well operations.....	261	40	2,689	11,038	2,307	4,494	9,691	21,165	4,290	2,838	25,340	2,953	3,592	27,632
Installing production equipment, such as well-head fittings, pumps and engines.....	140	34	2,289	10,097	1,889	3,424	7,934	16,819	3,189	1,557	19,600	1,965	2,157	12,622
Without well operations.....	136	33	2,228	9,904	1,828	3,299	7,741	16,400	3,108	1,555	19,114	1,949	2,157	12,622
Erecting, cleaning, repairing and dismantling lease tanks <sup>6</sup> .....	55	5	497	1,875	462	680	1,718	3,843	1,015	543	4,691	710	577	4,207
Pumping wells, but not operating leases.....	135	5	565	2,271	478	967	1,696	4,036	1,374	262	5,390	282	270	2,118
Without well operations.....	126	5	521	2,093	437	885	1,522	3,779	1,117	251	4,891	256	213	1,520
Other oil and gas field services, n.e.c., total.....	1,383	194	18,327	88,750	15,446	30,937	71,396	142,708	71,242	15,339	210,882	18,407	11,726	84,944
With well operations.....	80	7	624	3,493	507	1,014	2,439	9,509	2,777	2,043	11,942	2,387	297	2,934
Without well operations.....	1,303	187	17,703	85,257	14,939	29,923	68,957	133,199	68,465	13,296	198,940	16,020	11,429	82,010
North Central.....	545	39	3,846	15,948	3,283	6,400	13,185	32,318	9,549	3,254	41,358	3,763	(NA)	(NA)
Well surveying and well logging (without well operations).....	19	-	60	327	50	98	272	969	156	8	1,079	54	(NA)	(NA)
Cementing wells (without well operations).....	15	2	170	926	109	283	659	2,037	1,107	71	3,161	54	163	1,657
Excavating slush pits and cellars (without well operations).....	13	-	62	324	61	124	311	521	219	342	977	105	(NA)	(NA)
Running, cutting and pulling casing, tubes and rods, total.....	142	9	991	3,985	880	1,837	3,381	7,320	1,584	666	8,768	802	1,264	7,984
With well operations.....	7	1	66	266	62	135	260	676	139	34	765	84	236	1,420
Without well operations.....	135	8	925	3,719	818	1,702	3,121	6,644	1,445	632	8,003	718	1,028	6,564
Perforating well casing (without well operations).....	14	-	56	356	44	110	204	1,034	419	152	1,407	198	(NA)	(NA)
Acidizing and other chemical treatment of wells (without well operations).....	10	1	65	428	59	152	374	834	483	92	1,348	61	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells.....	37	4	273	938	226	404	781	1,922	422	232	2,220	356	223	1,616
Installing production equipment, such as well-head fittings, pumps and engines.....	31	6	408	1,367	381	545	1,248	2,457	455	406	2,915	403	231	1,206
Pumping wells, but not operating leases.....	30	1	101	429	74	137	320	816	598	27	1,405	36	(NA)	(NA)
Michigan:														
Running, cutting and pulling casing, tubes and rods, total.....	10	1	91	412	87	169	399	677	131	33	792	49	65	358
North Dakota:														
Running, cutting and pulling casing, tubes and rods (without well operations).....	6	2	131	786	102	216	563	1,493	258	149	1,731	169	(NA)	(NA)
Nebraska.....	32	3	252	1,261	185	370	888	2,656	(D)	490	3,227	(D)	(NA)	(NA)
Installing production equipment, such as well-head fittings, pumps and engines (without well operations)...	6	2	68	333	51	127	266	743	154	94	882	109	(NA)	(NA)

See footnotes at end of table.

1963 and 1958—Continued

Division, State, and type of operation <sup>1</sup>	1963												1958	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
INDUSTRY 1389.—OIL AND GAS FIELD SERVICES, N.E.C.—Continued														
<u>Principal Type of Service and Geographic Area—Continued</u>														
North Central—Continued														
Kansas.....	278	21	1,984	7,925	1,753	3,417	6,804	16,077	4,941	1,691	20,806	1,903	1,483	11,006
Well surveying and well logging and cementing wells, (without well operations).....	16	2	119	889	114	279	750	2,094	964	44	3,039	63	100	1,228
Excavating slush pits and cellars (without well operations).....	10	-	56	298	55	110	285	484	186	278	852	96	(NA)	(NA)
Running, cutting and pulling casing, tubes and rods.....	66	7	560	2,065	502	1,074	1,757	3,726	811	296	4,432	401	790	4,984
Without well operations.....	63	6	515	1,891	459	984	1,586	3,327	722	265	3,958	356	617	3,884
Perforating well casing (without well operations).....	7	-	31	200	24	63	73	586	275	100	833	128	(NA)	(NA)
Acidizing and other chemical treatment of wells (without well operations).....	6	1	45	320	41	103	284	715	389	58	1,101	61	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells.....	12	2	113	348	93	177	292	797	142	75	828	186	101	789
Installing production equipment, such as well-head fittings, pumps and engines (without well operations)...	13	2	218	626	211	194	604	1,049	194	285	1,257	271	89	487
Pumping wells, but not operating leases.....	19	1	65	268	51	101	226	427	272	21	705	15	(NA)	(NA)
South Atlantic and East South Central.....	133	12	1,148	4,218	1,033	1,992	3,776	9,333	2,497	1,782	11,658	1,954	1,066	6,580
Well surveying and well logging and cementing wells (without well operations).....	11	1	97	563	87	204	517	1,628	390	903	1,991	930	(NA)	(NA)
Running, cutting and pulling casing, tubes and rods.....	25	2	174	683	148	299	571	1,579	373	307	1,910	349	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells (without well operations).....	18	-	92	290	89	210	284	547	147	39	671	62	(NA)	(NA)
Kentucky:														
Running, cutting and pulling casing, tubes and rods.....	13	1	76	314	65	125	247	497	142	18	626	31	(NA)	(NA)
Erecting, cleaning, repairing and dismantling lease tanks (without well operations).....	3	1	67	211	63	101	197	419	114	78	523	88	(NA)	(NA)
Mississippi.....	46	6	497	1,744	433	777	1,529	4,279	1,002	488	5,198	571	609	4,005
Running, cutting and pulling casing, tubes and rods (without well operations).....	7	1	92	359	77	162	314	999	215	278	1,181	311	274	1,660
West South Central.....	1,741	308	37,221	212,584	29,557	65,260	155,131	396,454	198,006	50,605	589,325	55,740	38,860	387,856
Well surveying and well logging and cementing wells.....	151	21	10,346	77,080	7,678	19,247	51,674	162,505	69,732	20,784	230,913	22,108	11,407	160,301
Building (erecting), repairing, or dismantling rigs and derricks (without well operations).....	41	10	538	2,443	435	703	1,660	3,410	930	183	4,282	241	780	5,148
Excavating slush pits and cellars (without well operations).....	29	7	460	1,903	359	772	1,444	4,032	1,318	534	5,310	574	533	4,295
Running, cutting and pulling casing, tubes and rods, total.....	266	59	3,837	16,155	3,420	6,737	13,880	34,599	9,355	4,206	43,725	4,435	4,571	31,366
With well operations.....	10	6	280	1,246	254	525	1,172	2,180	490	239	2,548	361	200	1,482
Without well operations.....	256	53	3,557	14,909	3,166	6,212	12,708	32,419	8,865	3,967	41,177	4,074	4,371	29,884
Perforating well casing (without well operations).....	32	8	1,397	9,739	721	2,122	4,765	19,949	5,099	1,992	23,964	3,076	4,029	47,646
Acidizing and other chemical treatment of wells (without well operations).....	42	9	3,612	26,046	2,656	7,361	18,145	48,736	48,490	5,813	95,240	7,799	3,562	42,527
Cleaning out, bailing out, or swabbing wells, total.....	167	34	2,052	8,328	1,765	3,401	7,349	16,359	3,145	2,023	19,347	2,180	2,852	21,043
With well operations.....	6	1	61	157	60	80	156	418	41	105	509	55	275	1,974
Without well operations.....	161	33	1,991	8,171	1,705	3,321	7,193	15,941	3,104	1,918	18,838	2,125	2,577	19,069
Installing production equipment, such as well-head fittings, pumps and engines.....	83	20	1,469	7,034	1,190	2,218	5,207	11,581	2,214	800	13,397	1,198	1,676	9,607
Erecting, cleaning, repairing and dismantling lease tanks.....	36	4	374	1,389	348	489	1,267	2,748	757	415	3,371	549	451	3,142
Pumping wells, but not operating														

TABLE 2A. **General Statistics by Geographic Areas and Type of Operation:**  
1963 and 1958—Continued

Division, State, and type of operation <sup>1</sup>	1963												1958	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
INDUSTRY 1389.—OIL AND GAS FIELD SERVICES, N.E.C.—Continued														
<u>Principal Type of Service</u> <u>and Geographic Area—Continued</u>														
West South Central—Continued														
Arkansas.....	37	4	357	1,190	326	611	1,050	2,370	519	225	2,877	237	271	1,863
Running, cutting and pulling casing, tubes and rods.....	16	3	188	649	177	340	605	1,206	287	155	1,482	166	64	468
Louisiana.....	271	73	10,506	66,033	8,368	18,155	45,868	104,582	64,493	14,080	166,695	16,460	6,256	49,750
Well surveying and well logging and cementing wells.....	31	8	3,933	29,546	2,860	6,343	17,083	59,806	24,148	7,940	83,354	8,540	501	5,156
Building (erecting), repairing, or dismantling rigs and derricks (without well operations).....	11	5	221	809	189	287	577	1,046	340	4	1,355	35	287	1,704
Running, cutting and pulling casing, tubes and rods.....	28	9	482	2,222	390	713	1,732	3,845	786	485	4,582	534	585	4,067
Installing production equipment, such as well-head fittings, pumps and engines (without well operations)...	10	4	508	4,033	372	968	2,810	6,020	1,166	411	7,058	539	(NA)	(NA)
North Louisiana.....	72	9	586	2,289	518	1,073	2,072	4,808	1,788	1,021	6,411	1,206	(NA)	(NA)
Well surveying and well logging and cementing wells.....	8	-	34	193	21	55	125	571	380	229	935	245	(NA)	(NA)
Running, cutting and pulling casing, tubes and rods.....	13	4	172	667	168	359	653	1,210	266	243	1,413	306	(NA)	(NA)
South Louisiana.....	199	64	9,920	63,744	7,850	17,082	43,796	99,774	62,705	13,059	160,284	15,254	(NA)	(NA)
Well surveying and well logging (without well operations).....	23	8	3,899	29,353	3,192	6,910	16,958	59,235	23,768	7,711	82,419	8,295	(NA)	(NA)
Running, cutting and pulling casing, tubes and rods (without well operations).....	15	5	310	1,555	222	354	1,079	2,635	520	242	3,169	228	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells (without well operations).....	20	3	194	1,152	180	370	1,078	2,494	387	221	2,807	295	(NA)	(NA)
Installing production equipment, such as well-head fittings, pumps and engines (without well operations)...	6	4	473	3,929	338	927	2,708	5,865	1,140	398	6,881	522	(NA)	(NA)
Oklahoma.....	351	46	4,323	19,655	3,085	5,367	11,670	26,665	7,198	2,570	33,560	2,873	3,734	21,687
Running, cutting and pulling casing, tubes and rods (without well operations).....	70	7	619	2,206	591	951	2,063	4,260	989	276	5,049	476	895	5,896
Perforating well casing (without well operations).....	10	2	82	560	55	161	370	1,278	395	161	1,733	101	(NA)	(NA)
Acidizing and other chemical treatment of wells.....	6	2	50	231	48	104	220	828	206	78	1,021	91	51	961
Cleaning out, bailing out, or swabbing wells.....	28	11	627	2,411	561	1,069	2,095	4,249	783	466	5,071	427	654	4,126
Erecting, cleaning, repairing and dismantling lease tanks (without well operations).....	11	2	155	628	145	94	573	1,098	268	317	1,350	333	74	687
Pumping wells, but not operating leases.....	20	2	103	389	85	149	312	580	38	16	615	20	(NA)	(NA)

**TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Division, State, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
INDUSTRY 1389.—OIL AND GAS FIELD SERVICES, N.E.C.—Continued														
<u>Principal Type of Service and Geographic Area—Continued</u>														
West South Central—Continued														
Texas—Continued														
Other oil and gas field services, n.e.c., total.....	518	76	6,313	28,123	5,234	10,286	22,042	53,053	16,084	4,914	67,919	6,132	3,819	24,086
With well operations.....	22	2	181	1,222	91	144	353	3,979	868	835	4,674	1,008	134	1,520
Without well operations.....	496	74	6,132	26,901	5,143	10,142	21,689	49,074	15,216	4,079	63,245	5,124	3,685	22,566
Texas Gulf Coast A.....	174	30	2,704	14,044	1,950	3,900	9,040	28,642	9,632	2,765	37,723	3,316	(NA)	(NA)
Well surveying and well logging (without well operations).....	12	3	137	816	115	266	615	1,258	295	6	1,512	47	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells (without well operations).....	18	1	125	592	106	153	520	1,105	273	86	1,381	83	(NA)	(NA)
South Texas.....	107	10	968	3,797	772	1,712	3,193	8,945	2,889	1,120	11,623	1,331	(NA)	(NA)
Well surveying and well logging and cementing wells (without well operations).....	14	1	85	471	71	168	391	1,913	249	44	2,068	138	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells (without well operations).....	11	1	130	218	61	125	118	517	122	98	617	120	(NA)	(NA)
Southwest Texas.....	30	4	227	658	188	372	524	1,327	375	93	1,680	115	(NA)	(NA)
Running, cutting and pulling casing, tubes and rods (without well operations).....	8	1	57	222	56	115	217	524	100	28	578	74	(NA)	(NA)
North Central Texas A.....	115	13	945	3,203	793	1,538	2,739	5,964	2,170	255	7,986	403	(NA)	(NA)
Running, cutting and pulling casing, tubes and rods.....	28	4	254	811	248	451	801	1,546	379	72	1,871	126	(NA)	(NA)
Without well operations.....	25	3	232	713	226	412	703	1,296	337	68	1,612	89	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells.....	19	1	91	256	87	174	249	539	124	29	652	40	(NA)	(NA)
North Central Texas B.....	81	5	522	2,148	463	1,104	1,882	4,861	1,171	311	5,701	642	(NA)	(NA)
Well surveying and well logging and cementing wells (without well operations).....	10	1	61	322	51	162	257	1,045	237	18	1,183	117	(NA)	(NA)
Running, cutting and pulling casing, tubes and rods.....	23	2	225	888	221	594	847	1,673	333	85	1,939	152	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells.....	3	1	39	220	34	82	203	469	64	113	544	102	(NA)	(NA)
East Texas B.....	102	17	1,280	5,603	1,124	2,327	5,029	11,359	3,484	1,076	14,695	1,224	(NA)	(NA)
Running, cutting and pulling casing, tubes and rods.....	20	7	316	1,263	274	558	1,316	2,134	469	369	2,729	243	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells (without well operations).....	13	2	131	557	122	277	528	1,203	221	139	1,444	119	(NA)	(NA)
West Texas A.....	291	76	13,152	85,824	10,530	25,916	64,726	183,352	100,388	25,581	282,574	26,747	(NA)	(NA)
Building (erecting), repairing, or dismantling rigs and derricks.....	5	2	90	667	83	145	514	1,189	182	129	1,367	133	(NA)	(NA)
Excavating slush pits and cellars (without well operations).....	8	3	174	739	142	285	588	1,939	418	206	2,359	204	(NA)	(NA)
Running, cutting and pulling casing, tubes and rods (without well operations).....	30	16	835	3,750	742	1,377	3,176	6,648	1,133	1,718	8,109	1,390	(NA)	(NA)
Acidizing and other chemical treatment of wells (without well operations).....	19	6	3,464	24,960	2,593	6,827	16,785	42,927	46,961	7,731	90,217	7,402	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells (without well operations).....	23	8	365	1,743	327	577	1,511	3,149	692	543	3,766	618	(NA)	(NA)
Installing production equipment, such as well-head fittings, pumps and engines (without well operations)...	14	7	218	934	150	288	586	1,838	333	183	2,094	260	(NA)	(NA)
Erecting, cleaning, repairing and dismantling lease tanks (without well operations).....	10	1	108	393	101	206	380	827	195	18	980	60	(NA)	(NA)
Pumping wells, but not operating leases.....	49	1	250	938	220	447	838	1,716	551	128	2,279	116	(NA)	(NA)
West Texas B.....	36	5	460	1,874	379	804	1,655	3,033	716	214	3,621	342	(NA)	(NA)
Running, cutting and pulling casing, tubes and rods.....	8	2	179	899	176	410	885	1,644	316	80	1,867	173	(NA)	(NA)

See footnotes at end of table.

TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Division, State, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
INDUSTRY 1389.—OIL AND GAS FIELD SERVICES, N.E.C.—Continued														
<u>Principal Type of Service and Geographic Area—Continued</u>														
West South Central—Continued														
Texas—Continued														
Texas Panhandle.....	85	15	937	4,572	833	2,003	4,182	8,105	2,893	1,844	11,497	1,345	(NA)	(NA)
Running, cutting and pulling casing, tubes and rods (without well operations).....	13	3	201	1,090	189	540	1,007	1,814	298	244	2,083	273	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells, total (without well operations).....	12	3	150	584	123	251	461	1,181	198	195	1,344	230	(NA)	(NA)
Mountain.....	325	40	3,123	14,520	2,733	5,707	12,731	28,944	7,284	3,836	36,376	3,688	2,174	19,149
Well surveying and well logging (without well operations).....	31	1	119	563	82	181	369	1,749	216	29	1,844	150	87	709
Excavating slush pits and cellars (without well operations).....	10	1	53	178	42	72	166	558	64	65	635	52	41	769
Running, cutting and pulling casing, tubes and rods (without well operations).....	40	11	665	3,463	628	1,343	3,143	6,711	1,140	1,195	7,939	1,107	473	3,794
Perforating well casing (without well operations).....	5	1	58	350	49	119	295	828	298	49	1,087	88	(NA)	(NA)
Acidizing and other chemical treatment of wells (without well operations).....	8	-	48	319	39	118	271	795	409	264	1,236	232	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells.....	26	1	169	746	139	289	634	1,208	334	530	1,819	253	326	3,093
Installing production equipment, such as well-head fittings, pumps and engines (without well operations)...	17	6	295	1,267	207	462	1,081	1,983	358	233	2,330	244	228	1,718
Pumping wells, but not operating leases.....	21	1	68	328	50	120	278	656	138	92	779	107	(NA)	(NA)
Wyoming.....	85	9	676	3,647	570	1,241	3,142	8,001	2,097	702	9,888	912	325	3,300
Well surveying and well logging and cementing wells (without well operations).....	10	-	31	147	23	58	121	850	84	14	884	64	(NA)	(NA)
Running, cutting and pulling casing, tubes and rods (without well operations).....	10	4	209	1,341	186	491	1,101	2,550	448	292	2,944	346	90	936
Colorado.....	45	2	222	1,219	194	417	1,048	2,415	581	456	3,083	369	350	3,199
Running, cutting and pulling casing, tubes and rods (without well operations).....	8	1	58	384	58	144	384	745	101	267	993	120	73	447
New Mexico.....	134	20	1,562	6,563	1,414	2,769	5,682	13,012	3,267	1,893	16,314	1,858	1,125	9,604
Well surveying and well logging and cementing wells (without well operations).....	10	-	47	225	37	90	183	655	138	2	750	45	(NA)	(NA)
Running, cutting and pulling casing, tubes and rods (without well operations).....	16	6	371	1,608	357	657	1,528	3,161	547	611	3,689	630	290	2,262
Cleaning out, bailing out, or swabbing wells (without well operations).....	12	1	86	288	65	136	238	546	135	161	714	128	160	1,338
East New Mexico.....	106	19	1,398	5,744	1,281	2,475	5,036	11,371	2,723	1,633	14,113	1,614	(NA)	(NA)
Running, cutting and pulling casing, tubes and rods (without well operations).....	11	6	353	1,452	342	616	1,391	2,765	479	500	3,237	507	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells (without well operations).....	12	1	86	288	65	136	238	546	135	161	714	128	(NA)	(NA)
Utah.....	23	4	298	1,670	281	646	1,577	2,977	753	681	3,978	433	207	1,555
Installing production equipment, such as well-head fittings, pumps and engines (without well operations)...	5	2	77	430	72	164	386	801	131	169	932	169	(NA)	(NA)

See footnotes at end of table.



TABLE 2A. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Division, State, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
INDUSTRY 1389.—OIL AND GAS FIELD SERVICES, N.E.C.—Continued														
<u>Principal Type of Service and Geographic Area—Continued</u>														
Pacific.....	187	33	2,624	17,240	2,141	4,135	13,531	28,611	8,761	2,365	36,914	2,823	21,917	219,168
Well surveying and well logging and cementing wells (without well operations).....	34	4	297	2,070	205	472	1,493	4,278	1,568	263	5,490	619	203	2,437
Running, cutting and pulling casing, tubes and rods.....	14	4	184	1,316	175	350	1,223	2,014	635	190	2,583	256	361	2,936
Perforating well casing (without well operations).....	5	-	34	270	25	56	192	863	119	43	964	61	(NA)	(NA)
Cleaning out, bailing out, or swabbing wells.....	12	2	167	966	149	283	864	1,818	318	123	2,076	183	282	2,743
California.....	181	32	2,560	16,636	2,082	4,003	13,031	27,241	8,625	2,274	35,517	2,623	1,917	19,168
Running, cutting and pulling casing, tubes and rods.....	14	4	184	1,316	175	350	1,223	2,014	635	190	2,583	256	361	2,936
Perforating well casing (without well operations).....	5	-	34	270	25	56	192	863	119	43	964	61	(NA)	(NA)
Acidizing and other chemical treatment of wells (without well operations).....	6	-	27	154	13	26	59	597	468	1	1,024	42	(NA)	(NA)

Note: See appendix A for explanation of column captions.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. n.e.c. Not elsewhere classified.

<sup>1</sup>General statistics for some States are not shown separately in this table in order to avoid disclosing figures for individual companies or because of the relatively small size of the statistics. Such States are shown below for 1963, with the number of establishments in each State (and in parentheses the number of employees or employment-size range):

SIC 1381, Drilling Oil and Gas Wells: Missouri, 5 (20-49); South Dakota, 2 (10-19); Maryland, 1 (10-19); Virginia, 1 (0-4); Florida, 2 (10-19); Tennessee, 4 (11); Utah, 12 (250-499); Nevada, 2 (10-19); Washington, 2 (10-19); and Alaska, 5 (100-249).

SIC 1382, Oil and Gas Exploration Services: New York, 1 (5-9); Pennsylvania, 1 (5-9); Ohio, 6 (52); Indiana, 3 (21); Illinois, 6 (10-19); West Virginia, 4 (10-19); Kentucky, 8 (17); Tennessee, 2 (0-4); Alabama, 2 (0-4); Arkansas, 5 (9); Montana, 10 (89); Arizona, 2 (10-19); Utah, 8 (38); Nevada, 1 (5-9); Washington, 1 (0-4); and Alaska, 4 (250-499).

SIC 1389, Oil and Gas Field Services, N.E.C.: New York, 11 (50-99); Pennsylvania, 61 (100-249); Ohio, 40 (129); Indiana, 18 (70); Illinois, 118 (500-999); Michigan, 34 (100-249); Missouri, 4 (7); North Dakota, 21 (372); West Virginia, 43 (195); South Carolina, 1 (0-4); Kentucky, 39 (424); Alabama, 4 (20-49); Arizona, 2 (10-19); Nevada, 1 (0-4); Washington, 2 (5-9); and Alaska, 4 (50-99).

<sup>2</sup>Excludes figures for Alaska. For 1958, 4 establishments, with 35 employees, were classified in the Oil and Gas Field Services Industries in Alaska.

<sup>3</sup>Figures for drilling in, spudding in, and tailing in are included with those for reworking wells.

<sup>4</sup>For 1963 represents 73 establishments without well operations and one establishment with well operations.

<sup>5</sup>For 1963 represents 218 establishments without well operations and 2 establishments with well operations engaged primarily in well surveying and well logging and 48 establishments, all without well operations, engaged primarily in cementing wells.

<sup>6</sup>For 1963, represents 53 establishments without well operations and 2 establishments with well operations.

**TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958**

(For this table selected data reported by service establishments for all operations in the United States were allocated by county on the basis of county data reported for number of employees, receipts for services, capital expenditures, and oil and gas shipped, if any.)

receipts for services, capital expenditures, and oil and gas shipped, if any.)															
Code	Division, State, district, county, and industry	1963												1958	
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub-contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees on March 15	Receipts for services and shipments
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
	UNITED STATES														
138	Oil and gas field services.....	19,861	1,345	112,373	631,727	96,593	206,588	517,393	1,241,354	616,691	187,755	1,817,894	227,906	114,470	1,626,851
1381	Drilling oil and gas wells...	8,483	706	55,416	318,150	50,333	106,266	281,064	653,337	358,324	115,681	979,316	148,026	256,777	2904,939
1382	Oil and gas exploration services.....	1,702	91	8,683	47,828	7,232	16,246	36,915	89,988	31,498	10,064	119,824	11,726	29,968	287,215
1389	Oil and gas field services, n.e.c.....	9,676	548	48,274	265,749	39,028	84,076	199,414	498,029	226,869	62,010	718,754	68,154	247,470	2,633,729
	Survey, log, cement services subindustry.....	1,973	153	11,138	81,805	8,251	20,584	55,201	173,821	73,379	22,134	245,335	23,999	12,623	220,829
	Miscellaneous oil and gas field services subindustry	7,703	395	37,136	183,944	30,777	63,492	144,213	324,208	153,490	39,876	473,419	44,155	34,847	412,900
	MIDDLE ATLANTIC DIVISION														
1381	Drilling oil and gas wells.....	188	5	638	3,255	589	1,390	2,962	6,216	3,574	604	9,476	918	1,257	16,460
1382	Oil and gas exploration services.....	25	-	76	341	61	110	244	663	354	83	1,013	87		
1389	Oil and gas field services, n.e.c.: Survey, log, cement services subindustry.....	40	3	96	672	81	220	560	2,098	872	284	2,947	307	(NA)	(NA)
	New York														
138	Oil and gas field services.....	84	-	153	978	148	354	818	1,703	721	71	2,341	154	194	2,298
1381	Drilling oil and gas wells...	39	-	90	517	79	176	445	1,031	462	35	1,439	89	(NA)	(NA)
	Pennsylvania														
1381	Drilling oil and gas wells.....	148	5	548	2,738	510	1,214	2,517	5,185	3,112	569	8,037	829	1,063	14,162
1382	Oil and gas exploration services.....	18	-	65	256	51	84	182	569	342	74	916	69		
1389	Oil and gas field services, n.e.c.: Survey, log, cement services subindustry.....	32	3	90	636	78	211	539	2,005	846	267	2,837	281	(NA)	(NA)
	County														
138	Oil and gas field services:														
	Bedford.....	7	1	33	262	32	92	255	387	595	15	919	78	(NA)	(NA)
	Crawford.....	9	1	30	186	30	89	186	356	307	83	734	12	(NA)	(NA)
	Erie.....	5	-	35	229	31	92	207	688	536	43	1,131	136	(NA)	(NA)
	McKean.....	52	1	183	791	183	367	713	1,887	629	146	2,524	138	216	1,441
1381	Drilling oil and gas wells...	28	-	57	234	56	112	227	649	194	26	797	72	(NA)	(NA)
	Westmoreland.....	15	1	43	181	21	44	78	502	260	54	740	76	(NA)	(NA)
	Undistributed by county.....	25	-	59	342	84	141	318	636	307	87	977	53	134	1,129
	EAST NORTH CENTRAL DIVISION														
1381	Drilling oil and gas wells.....	825	26	3,079	14,224	2,853	5,377	13,043	31,219	13,240	2,711	43,220	3,950	(NA)	(NA)
1382	Oil and gas exploration services.....	66	1	139	873	117	291	629	1,659	588	144	2,196	195	(NA)	(NA)
	Ohio														
138	Oil and gas field services.....	384	8	1,175	6,101	1,093	2,302	5,483	15,070	6,344	1,756	21,148	2,022	849	11,035
1381	Drilling oil and gas wells...	252	4	863	4,464	828	1,679	4,188	10,621	4,476	1,148	14,935	1,310	(NA)	(NA)
1382	Oil and gas exploration services.....	30	1	75	434	60	152	317	955	436	73	1,357	107	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	102	3	237	1,203	205	471	978	3,494	1,432	535	4,856	605	(NA)	(NA)
	Survey, log, cement services subindustry.....	23	2	98	702	85	221	572	2,041	925	444	2,911	499	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry	79	1	139	501	120	250	406	1,453	507	91	1,945	106	(NA)	(NA)
	County														
138	Oil and gas field services:														
	Homes.....	19	-	72	377	70	138	363	765	332	37	1,077	57	78	893
1381	Drilling oil and gas wells...	14	-	66	355	64	125	341	722	310	32	1,019	45	(NA)	(NA)
	Licking.....	29	1	75	448	69	156	370	1,308	254	79	1,523	118	60	576
	Mahoning.....	4	-	20	131	19	35	122	868	127	16	1,011	-	(NA)	(NA)

See footnotes at end of table.

**TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued**

Code	Division, State, district, county, and industry	1963											1958		
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub-contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees on March 15	Receipts for services and shipments
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)		
	EAST NORTH CENTRAL DIVISION—Continued														
	Ohio—Continued														
	County—Continued														
138	Oil and gas field services—Continued														
	Muskingum.....	12	1	44	296	39	95	260	774	413	88	1,216	59	78	1,690
	Portage.....	8	2	96	482	87	161	434	1,292	700	183	2,142	33	(NA)	(NA)
	Stark.....	7	-	34	191	30	67	161	318	221	75	568	46	(NA)	(NA)
	Wayne.....	14	1	72	459	66	148	424	1,358	618	176	1,924	228	118	1,916
138	Other counties.....	259	3	697	3,455	651	1,373	3,107	7,381	3,206	788	10,274	1,100	(NA)	(NA)
138	Undistributed by county.....	32	-	65	262	62	129	242	1,006	473	314	1,412	381	93	1,050
	Indiana														
138	Oil and gas field services.....	203	5	592	2,921	562	1,140	2,553	4,604	2,022	540	6,441	725	350	5,202
1381	Drilling oil and gas wells...	109	5	433	1,972	416	822	1,801	3,121	1,505	279	4,468	437	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	87	-	148	769	131	283	621	1,287	466	255	1,729	279	(NA)	(NA)
	County														
138	Oil and gas field services:														
	Posey:														
1381	Drilling oil and gas wells.	19	2	108	498	103	215	450	955	331	30	1,253	63	(NA)	(NA)
138	Undistributed by county.....	26	1	88	531	95	234	510	601	226	66	828	65	48	586
	Illinois														
1381	Drilling oil and gas wells.....	352	4	1,143	4,379	1,070	1,957	4,046	9,824	4,722	765	13,957	1,354	(NA)	(NA)
	County														
138	Oil and gas field services:														
	Franklin.....	15	-	56	199	55	96	195	431	280	25	716	20	(NA)	(NA)
	Lawrence.....	27	-	90	309	83	145	281	693	303	20	946	70	(NA)	(NA)
	Richland:														
1381	Drilling oil and gas wells.	16	-	65	347	58	122	277	867	436	106	1,246	163	(NA)	(NA)
	Wabash.....	48	2	150	666	129	286	513	1,733	932	64	2,608	121	(NA)	(NA)
	Wayne.....	48	-	145	649	137	282	570	1,150	493	256	1,702	297	117	2,157
	Undistributed by county.....	45	-	150	654	127	270	555	1,611	651	92	2,187	167	355	3,821
	Michigan														
1381	Drilling oil and gas wells.....	111	13	640	3,409	539	919	2,690	7,653	2,537	519	9,860	849	(NA)	(NA)
1389	Oil and gas field services, n.e.c.: Survey, log, cement services subindustry.....	7	-	53	361	44	102	273	954	389	111	1,398	56	(NA)	(NA)
	County														
138	Oil and gas field services:														
	Calhoun.....	18	2	87	774	73	160	489	1,303	933	96	2,277	55	(NA)	(NA)
	Undistributed by county.....	20	1	39	155	27	53	116	400	135	37	514	29	97	1,848
	WEST NORTH CENTRAL DIVISION														
1381	Drilling oil and gas wells.....	903	23	3,007	14,899	2,659	5,336	12,561	35,634	17,470	3,204	50,080	6,228	6,836	100,047
1382	Oil and gas exploration services.....	186	1	315	1,530	249	541	1,128	2,677	1,988	173	4,491	347		
1389	Oil and gas field services, n.e.c.: Survey, log, cement services subindustry.....	164	7	627	4,484	501	1,254	3,433	12,120	5,487	1,472	17,956	1,123	(NA)	(NA)
	Missouri														
138	Oil and gas field services.....	25	-	37	216	34	70	171	502	168	52	637	85	(NA)	(NA)

See footnotes at end of table.

TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued

Code	Division, State, district, county, and industry	1963											1958		
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub- contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expendi- tures	All employ- ees on March 15	Receipts for services and shipments
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)							
	WEST NORTH CENTRAL DIVISION-- Continued														
	North Dakota														
1381 1389	Drilling oil and gas wells.... Oil and gas field services, n.e.c.:	30	6	256	1,642	240	619	1,480	4,365	1,899	286	5,544	1,006	(NA)	(NA)
	Survey, log, cement services subindustry.....	15	1	52	370	45	109	287	924	426	117	1,387	80	(NA)	(NA)
	County														
138	Oil and gas field services:														
	Bottineau.....	11	1	56	336	54	143	320	989	409	32	1,176	254	(NA)	(NA)
	Bowman.....	7	1	30	211	27	73	180	342	258	63	635	28	(NA)	(NA)
	Burke.....	19	3	164	635	108	206	509	1,833	574	83	2,097	393	(NA)	(NA)
	McKenzie.....	15	1	119	811	108	243	733	1,377	555	119	1,979	72	330	6,121
	Undistributed by county.....	22	1	80	498	73	143	437	1,384	302	87	1,639	134	138	1,403
	South Dakota														
138	Oil and gas field services....	24	-	53	296	46	106	254	553	322	51	870	57	(NA)	(NA)
	Nebraska														
138 1381 1389	Oil and gas field services.... Drilling oil and gas wells... Oil and gas field services, n.e.c.....	226 95 114	3 - 3	630 282 321	3,416 1,560 1,715	527 256 246	1,085 485 546	2,663 1,302 1,252	8,008 3,905 3,965	3,700 2,156 1,409	1,131 377 739	11,346 5,777 5,295	1,493 661 818	620 (NA)	12,523 (NA)
	Survey, log, cement services subindustry.....	24	1	67	480	54	133	372	1,262	619	167	1,939	109	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry	90	2	254	1,235	192	413	880	2,703	790	572	3,356	709	(NA)	(NA)
	County														
138	Oil and gas field services:														
1381	Kimball:														
	Drilling oil and gas wells.	13	-	51	242	47	88	205	767	510	99	1,275	101	(NA)	(NA)
	Red Willow.....	16	-	75	456	62	121	301	1,380	476	153	1,824	185	(NA)	(NA)
	Scotts Bluff.....	13	-	21	159	19	39	124	384	254	23	637	24	(NA)	(NA)
	Undistributed by county.....	27	-	41	197	41	89	178	337	250	71	591	67	98	1,744
	Kansas														
138 1381 1382	Oil and gas field services.... Drilling oil and gas wells... Oil and gas exploration services.....	1,880 756 138	35 17 1	4,979 2,367 209	23,872 11,431 1,039	4,403 2,121 162	8,994 4,153 348	19,828 9,546 739	54,927 26,689 2,047	25,375 13,063 1,666	5,764 2,493 90	78,330 37,772 3,567	7,736 4,473 236	4,961 (NA)	65,992 (NA)
1389	Oil and gas field services, n.e.c.....	986	17	2,403	11,402	2,120	4,493	9,543	26,191	10,646	3,181	36,991	3,027	(NA)	(NA)
	Survey, log, cement services subindustry.....	109	5	506	3,597	422	1,055	2,961	9,863	4,331	1,158	14,437	915	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry	877	12	1,897	7,805	1,698	3,438	6,582	16,328	6,315	2,023	22,554	2,112	(NA)	(NA)
	County														
	Oil and gas field services:														
1381 1389	Barton..... Drilling oil and gas wells. Oil and gas field services, n.e.c.....	118 43 70	6 1 5	543 145 375	2,871 636 2,107	472 126 327	1,050 242 767	2,342 496 1,736	5,802 1,690 4,039	2,413 684 1,697	425 51 373	8,096 2,327 5,670	544 98 439	601 (NA)	7,671 (NA)
	Survey, log, cement services subindustry....	9	2	105	777	83	220	605	1,553	714	160	2,360	67	(NA)	(NA)
	Miscellaneous oil and gas field services sub- industry.....	61	3	270	1,330	244	547	1,131	2,486	983	213	3,310	372	(NA)	(NA)
1381 1389	Butler..... Drilling oil and gas wells. Oil and gas field services, n.e.c.....	49 18 26	4 1 3	272 98 169	1,359 509 844	241 92 147	534 188 343	1,197 463 730	2,770 932 1,816	1,173 545 623	496 68 426	3,869 1,362 2,481	570 183 384	324 (NA)	2,976 (NA)
	Survey, log, cement services subindustry....	6	1	58	408	51	138	354	915	470	101	1,412	74	(NA)	(NA)
	Miscellaneous oil and gas field services sub- industry.....	20	2	111	436	96	205	376	901	153	325	1,069	310	(NA)	(NA)

See footnotes at end of table.

**TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued**

Code	Division, State, district, county, and industry	1963											1958		
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub- contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expendi- tures	All employ- ees on March 15	Receipts for services and shipments
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
	WEST NORTH CENTRAL DIVISION— Continued														
	Kansas—Continued														
	County—Continued														
138	Oil and gas field services— Continued														
1381	Chautauqua.....	14	2	106	369	102	188	344	1,030	417	137	1,388	196	(NA)	(NA)
	Drilling oil and gas wells	8	2	95	345	92	168	324	958	396	135	1,298	191	(NA)	(NA)
1381	Cowley.....	43	-	132	583	110	229	502	1,169	589	74	1,738	94	214	2,881
	Drilling oil and gas wells	16	-	81	388	77	146	359	712	418	38	1,102	66	(NA)	(NA)
1381	Ellis:														
1381	Drilling oil and gas wells	29	1	129	815	103	221	608	2,330	888	190	3,183	225	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	45	1	150	931	140	333	790	2,281	1,045	284	3,292	318	(NA)	(NA)
	Survey, log, cement services subindustry...	5	1	62	472	54	136	374	7,248	543	160	1,833	118	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	40	-	88	459	84	197	416	1,033	502	124	1,459	200	(NA)	(NA)
	Grant.....	18	1	61	442	53	131	316	944	898	166	1,789	219	58	222
	Greenwood.....	43	-	123	562	118	254	516	1,387	560	109	1,958	98	176	2,288
	Haskell.....	18	-	19	102	17	36	84	677	436	100	1,133	80	(NA)	(NA)
1381	Hodgeman.....	32	1	86	487	79	171	435	1,548	1,464	196	2,919	289	(NA)	(NA)
1382	Drilling oil and gas wells	13	1	62	350	60	127	339	809	604	157	1,320	250	(NA)	(NA)
	Oil and gas exploration services.....	7	-	13	63	9	21	43	572	779	3	1,337	17	(NA)	(NA)
1381	Meade.....	24	-	32	179	26	55	136	829	325	129	1,217	66	(NA)	(NA)
	Drilling oil and gas wells	9	-	25	142	19	41	104	714	275	120	1,052	57	(NA)	(NA)
1381	Morton:														
	Drilling oil and gas wells	13	1	50	275	48	95	256	588	478	68	1,056	78	(NA)	(NA)
	Ness.....	47	-	91	463	82	158	396	840	453	95	1,227	161	73	1,262
1381	Rice.....	74	-	150	646	140	258	569	1,637	1,087	205	2,738	191	73	979
	Drilling oil and gas wells	29	-	83	357	78	137	311	1,069	818	154	1,905	136	(NA)	(NA)
1381	Rooks.....	66	3	231	952	180	304	737	1,567	744	137	2,248	200	(NA)	(NA)
	Drilling oil and gas wells	24	3	159	667	120	190	499	902	480	73	1,295	160	(NA)	(NA)
	Rush.....	29	-	35	197	33	67	170	1,000	386	114	954	546	(NA)	(NA)
1381	Russell.....	104	1	361	1,535	309	592	1,284	3,367	1,465	395	4,644	583	207	2,725
1389	Drilling oil and gas wells	39	1	173	741	142	258	608	1,696	773	172	2,230	411	(NA)	(NA)
	Oil and gas field services, n.e.c.....	60	-	188	794	167	334	676	1,653	689	222	2,394	170	(NA)	(NA)
	Undistributed by county.....	100	4	402	1,821	374	771	1,602	3,339	1,663	283	4,921	364	814	9,736
	SOUTH ATLANTIC DIVISION														
138	Oil and gas field services....	399	12	1,572	8,115	1,462	3,198	6,939	18,047	9,371	1,591	26,639	2,370	1,521	13,655
1381	Drilling oil and gas wells..	226	7	1,070	5,286	1,026	2,217	4,729	11,714	5,917	1,022	17,165	1,488	(NA)	(NA)
1382	Oil and gas exploration services.....	23	1	87	531	74	158	405	1,448	318	209	1,902	73	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	150	4	415	2,298	362	823	1,805	4,885	3,136	360	7,572	809	(NA)	(NA)
	Survey, log, cement services subindustry....	51	2	105	695	85	210	517	1,835	767	208	2,376	434	(NA)	(NA)
	Miscellaneous oil and gas field services sub- dustry.....	99	2	310	1,603	277	613	1,288	3,050	2,369	152	5,196	375	(NA)	(NA)

See footnotes at end of table.

TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued

Code	Division, State, district, county, and industry	1963											1958		
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub- contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expendi- tures	All employ- ees on March 15	Receipts for services and shipments
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
	SOUTH ATLANTIC DIVISION--Con. <u>West Virginia</u>														
1381	Drilling oil and gas wells.....	216	6	1,039	5,037	981	2,130	4,491	11,119	5,514	966	16,207	1,392	(NA)	(NA)
1389	Oil and gas field services, n.e.c.: Survey, log, cement services subindustry.....	40	2	99	715	80	197	545	1,748	737	194	2,257	422	(NA)	(NA)
	County														
138	Oil and gas field services: Kanawha.....	16	1	102	694	90	216	535	1,423	724	87	2,139	95	21	415
	Lewis:														
1381	Drilling oil and gas wells.	19	1	131	574	126	237	531	1,568	874	88	2,418	112	(NA)	(NA)
138	Marshall.....	8	-	40	181	30	58	160	414	176	61	617	34	(NA)	(NA)
	Richie:														
1381	Drilling oil and gas wells.	26	-	104	426	102	223	415	994	579	56	1,501	128	(NA)	(NA)
	Upshur.....	12	3	134	724	124	286	649	1,646	991	67	2,583	121	57	530
1381	Drilling oil and gas wells.	9	3	120	638	114	263	581	1,565	921	60	2,440	106	(NA)	(NA)
	Undistributed by county.....	20	1	164	910	141	311	738	1,418	679	266	2,120	243	165	1,325
	<u>Florida</u>														
138	Oil and gas field services.....	15	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	133	1,773	(D)	135	1,685
	EAST SOUTH CENTRAL DIVISION														
138	Oil and gas field services.....	1,025	40	4,651	22,676	4,235	8,555	19,952	51,102	34,845	5,792	81,712	10,027	3,587	49,326
1381	Drilling oil and gas wells....	617	25	2,907	14,128	2,656	5,269	12,800	32,817	26,802	3,515	55,664	7,470	(NA)	(NA)
1382	Oil and gas exploration services.....	98	3	459	2,226	434	963	1,975	3,636	1,617	322	5,196	379	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	310	12	1,285	6,322	1,145	2,323	5,177	14,649	6,426	1,955	20,852	2,178	(NA)	(NA)
	Survey, log, cement services subindustry.....	73	4	334	2,397	279	662	1,865	6,807	3,032	1,155	9,932	1,062	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry	237	8	951	3,925	866	1,661	3,312	7,842	3,394	800	10,920	1,116	(NA)	(NA)
	<u>Kentucky</u>														
138	Oil and gas field services.....	431	9	1,314	4,811	1,227	2,309	4,268	10,590	5,030	1,105	15,063	1,662	1,243	13,202
1381	Drilling oil and gas wells....	313	4	851	2,807	788	1,419	2,513	5,945	3,032	343	8,433	887	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	103	5	435	1,852	414	830	1,629	4,269	1,917	742	6,179	749	(NA)	(NA)
	Survey, log, cement services subindustry.....	18	1	60	440	56	154	397	1,707	771	513	2,527	464	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry	85	4	375	1,412	358	676	1,232	2,562	1,146	229	3,652	285	(NA)	(NA)
	County														
138	Oil and gas field services: Davies.....	37	-	106	451	101	205	420	1,030	342	38	1,289	121	(NA)	(NA)
	Henderson.....	32	3	220	1,106	196	402	923	2,766	1,263	639	4,061	607	162	2,379
	Hopkins.....	23	2	132	453	128	167	400	909	604	76	1,443	146	(NA)	(NA)
1381	Drilling oil and gas wells.	19	2	130	445	127	164	395	766	537	54	1,231	126	(NA)	(NA)
	Johnson.....	14	1	82	288	72	142	243	712	454	13	1,148	31	(NA)	(NA)
	Pike.....	16	-	76	265	73	132	244	589	192	9	721	69	(NA)	(NA)
	Union.....	12	-	55	212	51	95	168	362	151	49	504	58	(NA)	(NA)
	Undistributed by county.....	36	-	91	319	89	186	307	714	412	56	1,115	67	179	1,671
	<u>Alabama</u>														
138	Oil and gas field services.....	61	3	372	2,166	344	817	1,921	5,137	6,402	655	11,371	823	215	2,825
1381	Drilling oil and gas wells....	22	2	265	1,541	254	615	1,443	3,843	5,739	527	9,398	711	(NA)	(NA)
	County														
138	Oil and gas field services: Mobile.....	22	3	277	1,713	255	657	1,508	4,327	5,973	608	10,175	733	114	1,203
	Undistributed by county.....	12	-	33	169	29	61	143	269	48	23	307	33	56	680

See footnotes at end of table.

**TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued**

Code	Division, State, district, county, and industry	1963												1958	
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub- contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expendi- tures	All employ- ees on March 15	Receipts for services and shipments
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)						(\$1,000)	(\$1,000)
	EAST SOUTH CENTRAL DIVISION— Continued														
	Mississippi														
138	Oil and gas field services....	519	28	2,946	15,671	2,650	5,400	13,739	35,251	23,351	4,015	55,109	7,508	2,122	33,270
1381	Drilling oil and gas wells..	275	19	1,777	9,752	1,602	3,211	8,820	22,921	17,992	2,640	37,697	5,856	(NA)	(NA)
1382	Oil and gas exploration services.....	62	3	404	1,938	384	837	1,734	2,947	1,394	263	4,297	307	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	182	6	765	3,981	664	1,352	3,185	9,383	3,965	1,112	13,115	1,345	(NA)	(NA)
	Survey, log, cement services subindustry.....	47	3	268	1,918	217	494	1,435	4,826	2,128	603	6,990	567	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry	135	3	497	2,063	447	858	1,750	4,557	1,837	509	6,125	778	(NA)	(NA)
	County														
138	Oil and gas field services:														
1381	Adams: Drilling oil and gas wells	18	3	264	1,240	251	467	1,133	2,296	1,496	266	3,759	299	(NA)	(NA)
1381	Amite..... Drilling oil and gas wells	17 11	1 1	83 62	577 393	67 52	135 109	404 287	997 729	703 614	77 52	1,657 1,321	120 74	(NA) (NA)	(NA) (NA)
1381	Franklin..... Drilling oil and gas wells	19 10	- -	83 56	563 422	72 53	147 109	488 394	1,601 1,214	737 573	148 83	2,392 1,834	94 36	(NA) (NA)	(NA) (NA)
	Greene.....	11	-	33	214	24	64	184	502	473	71	603	443	(NA)	(NA)
	Hinds.....	22	3	138	858	102	229	577	1,227	503	125	1,455	400	(NA)	(NA)
	Jefferson.....	17	-	52	320	48	132	291	384	248	23	635	20	(NA)	(NA)
1381	Jones: Drilling oil and gas wells	19	1	154	953	142	287	845	2,361	2,767	213	4,342	999	(NA)	(NA)
1381	Marion..... Drilling oil and gas wells	19 11	2 2	94 76	429 343	86 70	153 132	371 307	974 852	502 456	187 178	1,525 1,359	138 127	(NA) (NA)	(NA) (NA)
1381	Pike: Drilling oil and gas wells	12	2	58	391	51	115	328	1,148	1,004	131	2,104	179	(NA)	(NA)
1381	Simpson..... Drilling oil and gas wells	20 13	- -	68 25	342 139	66 24	148 42	310 128	876 575	530 495	129 105	1,335 1,006	200 169	112 (NA)	2,448 (NA)
1381	Smith: Drilling oil and gas wells	15	1	84	487	66	135	373	2,638	3,368	204	4,225	1,985	(NA)	(NA)
1381	Walthall..... Drilling oil and gas wells	19 13	- -	96 66	457 368	78 64	153 123	396 353	1,611 1,313	1,177 1,069	160 136	2,770 2,364	178 154	(NA) (NA)	(NA) (NA)
1381	Wayne..... Drilling oil and gas wells	31 15	- -	131 71	716 424	125 69	245 138	667 408	1,799 1,241	812 501	212 129	2,556 1,695	267 176	115 (NA)	2,094 (NA)
1381	Wilkinson..... Drilling oil and gas wells	14 7	- -	62 54	398 349	57 51	131 121	372 323	1,019 820	386 298	55 24	1,416 1,122	44 20	(NA) (NA)	(NA) (NA)
1381	Yazoo: Drilling oil and gas wells	9	1	52	201	52	81	201	934	322	32	1,156	132	(NA)	(NA)
	Undistributed by county....	38	4	357	1,391	341	647	1,267	2,506	2,052	210	4,230	538	242	2,596
	WEST SOUTH CENTRAL DIVISION														
138	Oil and gas field services....	11,052	902	74,205	416,289	63,385	136,883	341,692	800,466	404,617	133,593	1,178,273	160,433	77,531	1,104,140
1381	Drilling oil and gas wells..	4,731	468	35,846	206,574	32,521	69,650	183,006	424,467	233,091	85,153	635,902	106,809	(NA)	(NA)
1382	Oil and gas exploration services.....	901	60	5,278	28,887	4,266	9,981	21,968	48,803	16,818	5,590	68,834	7,377	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	5,420	374	33,081	180,828	26,598	57,252	136,718	327,196	154,708	42,850	478,507	46,247	(NA)	(NA)
	Survey, log, cement services subindustry.....	815	85	7,379	53,508	5,727	14,176	39,370	110,783	48,598	15,181	159,271	15,291	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry	4,605	289	25,702	127,320	20,871	43,076	97,348	216,413	106,110	27,669	319,236	30,956	(NA)	(NA)

See footnotes at end of table.

**TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued**

Code	Division, State, district, county, and industry	1963											1958		
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub-contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees on March 15	Receipts for services and shipments
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	WEST SOUTH CENTRAL DIVISION—Continued														
	Arkansas														
138	Oil and gas field services....	209	13	961	4,482	887	1,664	3,884	8,496	4,168	1,470	12,919	1,215	773	11,416
1381	Drilling oil and gas wells..	63	9	466	2,200	443	751	2,014	4,105	2,253	919	6,662	615	(NA)	(NA)
1382	Oil and gas exploration services.....	13	-	39	168	36	90	146	393	205	30	588	40	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	133	4	456	2,114	408	823	1,724	3,998	1,710	521	5,669	560	(NA)	(NA)
	Survey, log, cement services subindustry....	27	-	55	369	40	94	248	986	448	120	1,457	97	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry	106	4	401	1,745	368	729	1,476	3,012	1,262	401	4,212	463	(NA)	(NA)
	County														
138	Oil and gas field services:														
	Ouachita.....	20	-	73	209	58	107	189	363	197	23	542	41	(NA)	(NA)
	Sebastian.....	9	1	64	405	57	104	312	643	333	69	998	47	(NA)	(NA)
	Union:														
1381	Drilling oil and gas wells	12	3	138	630	129	245	557	1,167	851	540	2,360	198	(NA)	(NA)
	Undistributed by county.....	31	-	89	470	76	131	432	987	339	256	1,311	271	77	1,021
	Louisiana														
138	Oil and gas field services....	1,939	266	20,866	129,494	18,415	41,874	110,317	268,843	151,505	67,421	408,719	79,050	19,840	325,080
1381	Drilling oil and gas wells..	850	144	10,609	68,940	9,793	22,612	62,068	162,486	83,759	50,704	234,577	62,372	(NA)	(NA)
1382	Oil and gas exploration services.....	171	13	1,302	7,131	1,080	2,317	5,445	15,854	4,447	1,945	20,318	1,928	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	918	109	8,955	53,423	7,542	16,945	42,804	90,503	63,299	14,772	153,824	14,750	(NA)	(NA)
	Survey, log, cement services subindustry....	165	22	1,995	15,160	1,800	4,683	12,723	42,306	19,680	6,836	63,217	5,605	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry	753	87	6,960	38,263	5,742	12,262	30,081	48,197	43,619	7,936	90,607	9,145	(NA)	(NA)
	District and Parish														
138	Oil and gas field services:														
	North Louisiana.....	443	39	3,160	15,892	2,861	5,994	13,808	37,775	18,065	5,801	54,708	6,933	(NA)	(NA)
1381	Drilling oil and gas wells	206	24	2,007	9,761	1,859	3,778	8,708	23,517	12,241	3,372	34,625	4,505	(NA)	(NA)
1382	Oil and gas exploration services.....	23	2	165	960	145	336	816	2,521	462	341	3,006	318	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	214	13	988	5,171	857	1,880	4,284	11,737	5,362	2,088	17,077	2,110	(NA)	(NA)
	Survey, log, cement services subindustry....	46	4	261	1,882	234	577	1,648	5,670	2,637	1,000	8,427	880	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	168	9	727	3,289	623	1,303	2,636	6,067	2,725	1,088	8,650	1,230	(NA)	(NA)
	Caddo.....	90	16	972	4,572	898	1,703	3,988	10,618	4,087	1,479	14,300	1,884	701	5,886
1381	Drilling oil and gas wells.....	45	11	726	3,314	680	1,250	2,942	7,678	3,378	1,201	10,733	1,524	(NA)	(NA)
	Catahoula.....	28	-	134	642	123	242	586	2,977	1,332	149	4,244	214	109	1,076
1381	Drilling oil and gas wells.....	13	-	95	467	92	179	445	2,421	1,096	92	3,461	148	(NA)	(NA)
	Claiborne:														
1381	Drilling oil and gas wells.....	10	-	37	235	36	87	230	997	516	166	1,543	136	(NA)	(NA)
	Concordia.....	27	-	177	903	159	326	786	1,635	755	142	2,389	143	88	1,442
	De Soto.....	15	1	60	262	53	120	217	520	250	96	752	114	119	4,261
	Jackson.....	10	1	35	222	31	71	176	621	292	217	985	145	(NA)	(NA)
	LaSalle.....	19	1	146	988	123	316	828	2,657	1,700	508	4,113	752	(NA)	(NA)
1381	Drilling oil and gas wells.....	5	1	106	763	94	243	670	2,141	1,501	428	3,408	662	(NA)	(NA)
	Lincoln.....	16	-	69	342	65	131	302	1,217	1,223	244	2,484	200	57	86
1381	Drilling oil and gas wells.....	8	-	46	208	45	87	200	954	1,015	220	1,992	197	(NA)	(NA)

See footnotes at end of table.



**TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued**

Code	Division, State, district, county, and industry	1963											1958		
		County establishments, <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub-contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees on March 15	Receipts for services and shipments
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
	WEST SOUTH CENTRAL DIVISION—Continued														
	Louisiana—Continued														
	District and Parish—Con.														
	Oil and gas field services—Con.														
	Natchitoches.....	6	1	45	251	41	81	225	382	193	86	575	86	(NA)	(NA)
	Sabine.....	41	5	395	1,788	360	751	1,564	4,624	1,752	824	5,999	1,201	(NA)	(NA)
	Union.....	10	-	82	464	75	182	411	782	425	92	1,139	160	(NA)	(NA)
	Webster.....	20	1	50	224	49	111	221	918	410	243	1,317	254	109	1,908
1381	Drilling oil and gas wells.....	11	1	38	168	37	86	165	805	349	148	1,106	196	(NA)	(NA)
1381	South Louisiana:.....	1,404	211	16,743	108,983	14,670	34,109	92,519	222,019	127,838	58,456	340,758	67,555	(NA)	(NA)
1382	Drilling oil and gas wells.....	632	115	8,320	57,608	7,673	18,228	51,940	134,608	69,346	44,542	194,756	53,740	(NA)	(NA)
	Oil and gas exploration services.....	138	9	1,051	5,843	848	1,816	4,313	12,575	3,720	1,563	16,297	1,561	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	634	87	7,372	45,532	6,149	14,065	36,266	74,836	54,772	12,351	129,705	12,254	(NA)	(NA)
	Survey, log, cement services subindustry....	111	17	1,657	12,812	1,505	3,955	10,690	35,750	16,794	5,748	53,585	4,707	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	523	70	5,715	32,720	4,644	10,110	25,576	39,086	37,978	6,603	76,120	7,547	(NA)	(NA)
1381	Acadia.....	71	6	440	2,392	398	923	2,136	4,339	2,084	609	6,246	786	(NA)	(NA)
	Drilling oil and gas wells.....	31	5	269	1,596	248	598	1,435	2,804	1,549	526	4,230	649	(NA)	(NA)
1381	Ascension: Drilling oil and gas wells.....	9	1	104	521	100	161	490	1,138	834	57	1,949	80	(NA)	(NA)
1381	Assumption.....	28	1	67	313	58	116	252	914	647	290	1,696	155	99	3,889
	Drilling oil and gas wells.....	14	1	41	219	36	77	183	656	522	266	1,296	148	(NA)	(NA)
	Beauregard.....	31	-	63	310	59	105	272	702	395	94	1,112	79	162	2,628
1381	Calcasieu: Drilling oil and gas wells.....	28	1	192	1,039	180	434	954	3,523	1,070	346	3,872	1,067	(NA)	(NA)
1381	Cameron: Drilling oil and gas wells.....	31	8	344	2,198	326	786	2,000	4,911	2,547	917	7,500	875	(NA)	(NA)
	East Baton Rouge.....	10	-	47	244	32	81	207	887	229	67	1,059	124	111	428
1381	Iberia: Drilling oil and gas wells.....	31	3	249	1,689	220	497	1,413	2,203	1,136	476	3,470	345	(NA)	(NA)
1389	Oil and gas field services, n.e.c.: Survey, log, cement services subindustry..	6	2	77	633	72	204	576	1,713	624	222	2,384	175	(NA)	(NA)
1381	Iberville.....	34	3	183	1,030	170	452	948	2,611	1,301	466	4,035	343	215	2,104
	Drilling oil and gas wells.....	20	2	115	754	109	243	685	1,914	1,094	399	3,162	245	(NA)	(NA)
1389	Jefferson: Oil and gas field services, n.e.c.....	32	8	681	4,689	583	1,364	3,824	4,374	3,725	598	8,139	558	(NA)	(NA)
	Survey, log, cement services subindustry..	9	2	333	2,544	291	770	2,131	1,950	941	265	2,918	238	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	23	6	348	2,145	292	594	1,693	2,424	2,784	333	5,221	320	(NA)	(NA)

See footnotes at end of table.

TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued

Code	Division, State, district, county, and industry	1963												1958	
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub-contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees on March 15	Receipts for services and shipments
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
	WEST SOUTH CENTRAL DIVISION — Continued														
	Louisiana—Continued														
	District and Parish—Con.														
	Oil and gas field services—Con.														
1381	Jefferson Davis: Drilling oil and gas wells.....	22	2	162	917	153	390	827	1,641	1,342	246	2,438	791	(NA)	(NA)
1381	Lafayette: Drilling oil and gas wells.....	25	1	104	612	101	204	580	1,529	1,392	292	2,998	215	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	47	11	686	3,740	592	1,267	2,972	5,737	2,958	603	8,379	919	(NA)	(NA)
	Survey, log, cement services subindustry..	7	1	109	785	88	234	629	1,902	645	202	2,541	208	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	40	10	577	2,955	504	1,033	2,343	3,835	2,313	401	5,838	711	(NA)	(NA)
1381	Lafourche.....	97	16	995	6,317	880	1,848	5,358	13,311	7,928	3,515	21,133	3,621	(NA)	(NA)
1389	Drilling oil and gas wells.....	49	11	565	3,899	524	1,146	3,529	10,217	5,564	2,969	15,683	3,067	(NA)	(NA)
	Oil and gas field services, n.e.c.....	38	5	394	2,242	327	666	1,696	2,762	2,192	495	4,909	540	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	33	5	360	2,063	296	604	1,550	2,210	1,937	423	4,080	490	(NA)	(NA)
1381	Orleans.....	38	8	534	3,219	390	812	2,101	2,786	1,973	441	4,368	832	217	1,887
	Drilling oil and gas wells.....	17	5	245	1,337	199	396	950	2,162	1,137	335	3,139	495	(NA)	(NA)
1381	Plaquemines: Drilling oil and gas wells.....	41	13	697	5,237	637	1,533	4,662	10,714	6,304	2,214	17,068	2,164	(NA)	(NA)
1381	Rapides.....	14	-	46	198	43	91	176	448	217	87	708	44	(NA)	(NA)
	Drilling oil and gas wells.....	8	3	86	499	73	148	401	873	494	173	1,390	150	(NA)	(NA)
1381	St. Charles.....	29	1	129	799	116	252	687	1,831	565	295	2,414	277	(NA)	(NA)
	Drilling oil and gas wells.....	14	1	75	510	70	156	453	1,315	469	254	1,799	239	(NA)	(NA)
	St. James.....	14	-	41	231	34	77	218	559	400	230	1,125	64	70	850
1381	St. Landry.....	46	3	288	1,795	269	619	1,528	5,210	2,501	997	5,997	2,711	433	5,008
	Drilling oil and gas wells.....	26	1	148	900	141	335	807	3,196	1,642	783	3,087	2,534	(NA)	(NA)
1381	St. Martin: Drilling oil and gas wells.....	27	1	76	493	73	169	460	2,880	1,499	741	4,748	372	(NA)	(NA)
1381	St. Mary: Drilling oil and gas wells.....	33	6	357	2,682	318	747	2,121	4,590	2,636	1,147	7,297	1,076	(NA)	(NA)
1381	Terrebonne: Drilling oil and gas wells.....	35	13	642	4,994	599	1,621	4,492	10,043	3,938	2,105	12,783	3,303	(NA)	(NA)
1382	Oil and gas exploration services.....	12	4	179	988	168	426	915	1,578	546	104	2,146	82	(NA)	(NA)
1389	Oil and gas field services, n.e.c.: Survey, log, cement services subindustry..	12	4	270	1,955	230	585	1,633	5,449	1,885	605	7,401	538	(NA)	(NA)
1381	Vermilion: Drilling oil and gas wells.....	37	8	362	2,339	343	820	2,134	5,439	2,848	1,175	7,746	1,716	(NA)	(NA)

See footnotes at end of table.

**TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued**

Code	Division, State, district, county, and industry	1963												1958	
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub- contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expendi- tures	All employ- ees on March 15	Receipts for services and shipments
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
	WEST SOUTH CENTRAL DIVISION— Continued														
	Louisiana—Continued														
	District and Parish—Con.														
138	Oil and gas field services—Con.														
	Offshore.....	93	36	4,186	30,870	3,776	8,720	26,229	87,648	46,740	31,968	131,135	35,221	3,277	79,029
1381	Drilling oil and gas wells.....	37	23	3,062	22,452	2,834	6,867	19,942	56,278	27,104	27,711	79,445	31,648	(NA)	(NA)
1382	Oil and gas exploration services.....	9	3	321	1,804	263	386	1,272	6,129	1,329	991	7,327	1,122	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	47	10	803	6,614	679	1,467	5,015	24,241	18,307	3,266	44,363	2,451	(NA)	(NA)
	Survey, log, cement services subindustry..	7	2	334	3,006	287	651	2,177	17,205	8,063	2,006	25,414	1,860	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	40	8	469	3,608	392	816	2,838	8,036	10,244	1,260	18,949	591	(NA)	(NA)
	Undistributed by parish.....	92	16	963	4,619	884	1,771	3,990	9,049	5,602	3,164	13,253	4,562	2,442	30,697
	Oklahoma														
138	Oil and gas field services....	2,032	136	12,173	62,777	9,924	19,806	48,562	99,903	50,801	14,628	147,619	17,713	13,014	149,674
1381	Drilling oil and gas wells...	923	70	6,005	31,905	5,343	11,004	28,204	52,252	32,834	8,768	83,184	10,670	(NA)	(NA)
1382	Oil and gas exploration services.....	131	14	971	5,763	525	1,184	2,728	5,481	1,657	476	6,828	786	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	978	52	5,197	25,109	4,056	7,618	17,630	42,170	16,310	5,384	57,607	6,257	(NA)	(NA)
	Survey, log, cement services subindustry.....	113	12	1,233	9,229	661	1,691	4,502	12,975	5,754	1,570	18,213	2,086	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.	865	40	3,964	15,880	3,395	5,927	13,128	29,195	10,556	3,814	39,394	4,171	(NA)	(NA)
	County														
138	Oil and gas field services:														
	Beaver.....	56	1	263	1,503	233	500	1,290	3,146	2,518	565	5,455	774	(NA)	(NA)
1381	Drilling oil and gas wells.	29	1	216	1,200	195	433	1,065	2,408	2,163	449	4,334	686	(NA)	(NA)
	Beckham.....	9	1	58	386	55	94	300	744	203	119	964	102	(NA)	(NA)
	Blaine.....	13	-	53	333	49	114	299	501	607	134	1,101	141	(NA)	(NA)
1381	Drilling oil and gas wells.	7	-	52	329	48	112	295	456	551	121	1,000	128	(NA)	(NA)
	Canadian.....	11	1	36	203	33	69	166	227	403	35	646	19	107	769
	Carter.....	75	6	498	2,466	454	888	2,121	5,044	2,323	579	7,303	643	689	7,454
1381	Drilling oil and gas wells.	33	6	279	1,292	263	484	1,161	1,926	1,158	219	3,030	273	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	38	3	215	1,167	189	399	953	3,081	1,149	360	4,228	362	(NA)	(NA)
	Survey, log, cement services subindustry....	6	1	35	257	30	76	206	835	372	104	1,276	35	(NA)	(NA)
	Miscellaneous oil and gas field services subindus-try.....	32	2	180	910	159	323	747	2,246	777	256	2,952	327	(NA)	(NA)
	Cimarron.....	16	-	30	158	29	43	153	333	403	58	784	10	(NA)	(NA)
1381	Cleveland: Drilling oil and gas wells.	20	1	115	677	112	264	651	1,153	995	155	2,208	95	(NA)	(NA)
	Coal.....	12	1	46	252	44	99	236	353	208	16	501	76	(NA)	(NA)
1381	Creek.....	73	7	483	1,993	457	895	1,818	3,956	1,859	436	5,425	826	348	3,777
1389	Drilling oil and gas wells.	34	2	206	832	199	361	794	1,594	920	231	2,327	418	(NA)	(NA)
	Oil and gas field services, n.e.c.: Survey, log, cement services subindustry....	5	1	48	335	40	105	276	972	468	130	1,276	294	(NA)	(NA)
	Custer.....	9	-	9	42	9	18	42	296	303	40	549	90	(NA)	(NA)
1381	Dewey: Drilling oil and gas wells.	12	1	57	370	50	102	310	1,527	1,128	319	2,730	244	(NA)	(NA)
	Ellis.....	19	-	64	386	58	128	316	610	658	107	1,261	114	(NA)	(NA)
1381	Garfield: Drilling oil and gas wells.	28	2	167	935	158	336	857	2,031	1,397	230	3,515	143	(NA)	(NA)

See footnotes at end of table.

**TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958—Continued**

Code	Division, State, district, county, and industry	1963												1958	
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub- contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expendi- tures	All employ- ees on March 15	Receipts for services and shipments
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
	WEST SOUTH CENTRAL DIVISION— Continued														
	Oklahoma—Continued														
	County—Continued														
	Oil and gas field services—Con.														
	Garvin:														
1381	Drilling oil and gas wells.	35	8	401	2,300	376	798	2,111	4,702	2,091	669	6,756	706	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	36	6	440	1,856	351	458	1,385	3,671	1,410	381	5,009	453	(NA)	(NA)
	Survey, log, cement services subindustry....	5	1	68	502	54	140	384	1,639	613	200	2,168	284	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	31	5	372	1,354	297	318	1,001	2,032	797	181	2,841	169	(NA)	(NA)
1381	Grant:														
	Drilling oil and gas wells.	10	-	35	205	29	63	153	843	574	55	1,321	151	(NA)	(NA)
1381	Hughes:														
	Drilling oil and gas wells.	18	-	58	283	57	112	266	573	351	37	889	72	(NA)	(NA)
	Kay.....	44	-	88	391	81	169	352	998	438	191	1,398	229	(NA)	(NA)
	Kingfisher:														
	Drilling oil and gas wells.	37	6	365	2,053	328	714	1,678	4,692	2,707	1,256	6,209	2,447	(NA)	(NA)
1381	Latimer.....	14	1	115	719	104	252	628	1,615	818	408	2,605	236	(NA)	(NA)
	Drilling oil and gas wells.	6	1	71	481	64	158	418	1,114	551	311	1,789	187	(NA)	(NA)
	Le Flore.....	15	1	49	320	50	128	303	633	401	90	1,083	41	(NA)	(NA)
1381	Lincoln.....	43	1	187	752	172	308	669	2,106	1,020	135	3,090	171	175	2,354
	Drilling oil and gas wells.	24	-	103	489	94	197	422	1,440	790	93	2,192	131	(NA)	(NA)
1381	Logan:														
	Drilling oil and gas wells.	19	-	63	380	49	114	277	987	645	88	1,538	182	(NA)	(NA)
1381	McClain:														
	Drilling oil and gas wells.	22	3	185	1,134	173	405	1,044	2,076	1,587	248	3,614	297	(NA)	(NA)
1381	Major:														
	Drilling oil and gas wells.	15	1	66	445	62	135	412	1,166	750	168	1,929	155	(NA)	(NA)
1381	Oklahoma:														
1389	Drilling oil and gas wells.	47	4	370	2,119	325	653	1,614	3,779	2,053	334	4,950	1,216	(NA)	(NA)
	Oil and gas field services, n.e.c.....	40	8	482	2,515	433	950	2,046	3,627	1,100	305	4,654	378	(NA)	(NA)
	Survey, log, cement services subindustry....	7	3	107	780	91	250	642	872	451	60	1,273	110	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	33	5	375	1,735	342	700	1,404	2,755	649	245	3,381	268	(NA)	(NA)
1381	Osage:														
	Drilling oil and gas wells.	35	-	101	424	100	194	415	840	310	99	1,155	94	(NA)	(NA)
1381	Payne.....	33	5	301	1,518	273	550	1,321	2,830	1,356	380	4,050	516	228	2,433
	Drilling oil and gas wells.	12	2	159	842	145	275	730	1,379	872	241	2,211	281	(NA)	(NA)
	Pittsburg.....	11	1	61	357	59	141	344	420	306	48	658	116	(NA)	(NA)
	Pontotoc.....	35	2	122	394	108	186	322	779	156	63	941	57	(NA)	(NA)
1381	Pottawatomie:														
	Drilling oil and gas wells.	21	-	85	397	78	150	341	1,143	702	80	1,834	91	(NA)	(NA)
1381	Seminole:														
1389	Drilling oil and gas wells.	30	3	195	856	182	373	749	1,621	764	187	2,263	309	(NA)	(NA)
	Oil and gas field services, n.e.c.:														
	Survey, log, cement service subindustry....	6	1	39	274	33	87	227	721	341	80	1,031	111	(NA)	(NA)
1381	Stephens.....	83	8	1,335	9,032	544	1,068	2,874	4,263	2,409	459	6,162	969	1,549	8,877
1389	Drilling oil and gas wells.	40	3	302	1,603	292	534	1,519	2,210	1,709	261	3,816	364	(NA)	(NA)
	Oil and gas field service n.e.c.....	39	3	690	4,976	247	523	1,337	2,008	688	195	2,287	604	(NA)	(NA)
	Survey, log, cement service subindustry....	4	1												
	Miscellaneous oil and gas gas field services subindustry.....	35	2	690	4,976	118	312	864	1,017	490	134	1,100	541	(NA)	(NA)
						129	211	473	991	198	61	1,187	63	(NA)	(NA)

See footnotes at end of table.

TABLE 2B. **General Statistics Based on Location of Work, by Geographic Areas:**  
1963 and 1958--Continued

Code	Division, State, district, county, and industry	1963											1958		
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub- contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expendi- tures	All employ- ees on March 15	Receipts for services and shipments
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)							
	WEST SOUTH CENTRAL DIVISION— Continued														
	Oklahoma—Continued														
	County—Continued														
138	Oil and gas field services—Con.														
1381	Texas:														
	Drilling oil and gas wells.	25	2	158	894	153	314	853	1,339	1,612	337	3,133	155	(NA)	(NA)
	Tulsa.....	78	14	792	5,756	486	1,078	2,692	3,250	1,138	845	3,810	1,423	(NA)	(NA)
1381	Drilling oil and gas wells.	41	8	402	2,762	261	568	1,451	1,787	757	165	2,151	558	(NA)	(NA)
1382	Oil and gas exploration services.....	21	5	238	1,985	117	254	600	1,021	267	83	1,125	246	(NA)	(NA)
1381	Washington:														
	Drilling oil and gas wells.	13	-	49	212	41	90	202	407	134	19	538	22	(NA)	(NA)
	Woods.....	21	-	29	154	24	42	120	406	284	30	634	86	(NA)	(NA)
1381	Woodward:														
	Drilling oil and gas wells.	11	3	150	671	142	167	583	1,749	475	358	2,260	322	(NA)	(NA)
	Undistributed by county.....	149	10	880	3,431	791	1,376	2,982	6,515	2,438	966	8,672	1,247	1,695	22,794
	Texas														
138	Oil and gas field services.....	6,872	487	40,205	219,536	34,159	73,539	178,929	423,224	98,143	50,074	608,986	62,455	43,904	617,790
1381	Drilling oil and gas wells...	2,895	245	18,766	103,529	16,942	35,283	90,720	205,624	14,245	24,762	311,479	33,152	(NA)	(NA)
1382	Oil and gas exploration services.....	586	33	2,966	15,825	2,625	6,390	13,649	27,075	10,509	3,139	36,100	4,623	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	3,391	209	18,473	100,182	14,592	31,866	74,560	190,525	73,389	22,173	261,407	24,680	(NA)	(NA)
	Survey, log, cement services subindustry.....	510	51	4,096	28,750	3,226	7,708	21,897	54,516	22,716	6,655	76,384	7,503	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry	2,881	158	14,377	71,432	11,366	24,158	52,663	136,009	50,673	15,518	185,023	17,177	(NA)	(NA)
	District and County														
138	Oil and gas field services:														
1381	Texas Gulf Coast A.....	1,003	96	7,482	44,231	5,821	12,462	31,462	70,397	31,388	9,394	98,002	13,177	(NA)	(NA)
1382	Drilling oil and gas wells.	439	48	3,135	18,690	2,752	5,813	15,718	31,665	16,751	5,544	47,080	6,880	(NA)	(NA)
1382	Oil and gas exploration services.....	132	10	864	5,172	707	1,692	3,523	6,192	2,293	758	7,296	1,947	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	432	38	3,483	20,369	2,362	4,957	12,221	32,540	12,344	3,092	43,626	4,350	(NA)	(NA)
	Survey, log, cement services subindustry....	69	12	1,300	9,143	763	1,825	5,261	10,235	4,105	1,211	13,973	1,578	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	363	26	2,183	11,226	1,599	3,132	6,960	22,305	8,239	1,881	29,653	2,772	(NA)	(NA)
1381	Brazoria:														
	Drilling oil and gas wells.....	35	1	170	961	155	321	868	3,105	1,499	532	4,445	691	(NA)	(NA)
1381	Colorado:	38	-	78	432	67	137	369	1,497	506	106	1,897	212	99	2,423
	Drilling oil and gas wells.....	17	-	49	288	44	94	258	737	306	19	1,024	38	(NA)	(NA)
1381	Fort Bend:														
	Drilling oil and gas wells.....	19	1	61	379	50	112	318	1,011	260	115	1,300	86	(NA)	(NA)
1381	Galveston:														
	Drilling oil and gas wells.....	24	2	142	816	127	263	722	1,959	1,135	450	3,059	485	(NA)	(NA)
1381	Harris.....	166	36	3,069	20,591	1,878	4,160	10,696	25,500	9,810	2,443	32,062	5,691	2,338	16,863
1382	Drilling oil and gas wells.....	64	11	795	5,432	616	1,305	3,655	6,626	2,469	639	8,057	1,677	(NA)	(NA)
1382	Oil and gas exploration services.....	30	6	385	2,480	296	710	1,535	2,431	623	276	1,617	1,713	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	72	19	1,889	12,679	966	2,145	5,506	16,443	6,718	1,528	22,388	2,301	(NA)	(NA)
	Survey, log, cement services subindustry..	11	7	867	6,090	357	901	2,504	3,574	1,359	375	4,786	522	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	61	12	1,022	6,589	609	1,244	3,002	12,869	5,359	1,153	17,602	1,779	(NA)	(NA)
	Jasper.....	17	1	64	395	54	113	327	181	679	25	773	112	(NA)	(NA)
	Jefferson.....	70	9	591	2,994	499	989	2,494	5,454	3,223	907	8,499	1,085	(NA)	(NA)
1381	Drilling oil														

**TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued**

Code	Division, State, district, county, and industry	1963												1958	
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub- contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expendi- tures	All employ- ees on March 15	Receipts for services and shipments
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)							
	WEST SOUTH CENTRAL DIVISION— Continued														
	Texas—Continued														
	District and County—Con.														
138	Oil and gas field services— Continued														
1381	Madison: Drilling oil and gas wells.....	10	1	79	594	76	197	571	803	687	205	1,602	92	(NA)	(NA)
	Matagorda.....	73	7	498	2,705	467	1,037	2,453	5,130	3,480	721	8,171	1,160	(NA)	(NA)
1381	Drilling oil and gas wells.....	34	5	227	1,385	212	448	1,275	2,119	1,948	343	3,718	692	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	25	2	215	980	210	468	898	2,030	794	257	2,796	285	(NA)	(NA)
	Montgomery.....	31	1	93	474	84	138	384	911	344	389	1,259	385	69	1,356
1381	Orange: Drilling oil and gas wells.....	14	2	104	519	102	207	505	422	656	52	1,028	102	(NA)	(NA)
	Offshore.....	21	4	230	1,225	206	473	1,025	1,285	541	349	2,105	70	(NA)	(NA)
1382	Oil and gas exploration services.....	7	2	93	551	79	194	401	822	353	126	1,261	38	(NA)	(NA)
1381	Texas Gulf Coast B.....	558	21	2,028	11,249	1,822	3,950	9,886	22,126	11,192	2,362	32,578	3,102	(NA)	(NA)
1382	Drilling oil and gas wells.	287	12	1,134	6,830	1,061	2,334	6,248	13,350	7,377	1,482	20,352	1,857	(NA)	(NA)
	Oil and gas exploration services.....	64	-	125	609	98	243	468	1,402	492	223	1,473	644	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	207	9	769	3,810	663	1,373	3,170	7,374	3,323	657	10,753	601	(NA)	(NA)
	Survey, log, cement services subindustry....	42	3	225	1,582	210	467	1,417	3,617	1,310	394	4,975	346	(NA)	(NA)
	Miscellaneous oil and gas field services subindus- try.....	165	6	544	2,228	453	906	1,753	3,757	2,013	263	5,778	255	(NA)	(NA)
	Calhoun.....	39	1	63	353	57	119	316	976	462	162	1,427	173	(NA)	(NA)
	De Witt.....	45	2	191	1,006	141	319	794	1,456	1,136	97	2,547	142	136	2,361
1381	Drilling oil and gas wells.....	21	1	109	726	99	244	635	1,039	936	65	1,925	115	(NA)	(NA)
1381	Goliad: Drilling oil and gas wells.....	26	-	65	385	62	144	366	1,067	667	91	1,735	90	(NA)	(NA)
1381	Jackson.....	73	3	300	1,360	262	570	1,225	2,566	1,048	304	3,421	497	(NA)	(NA)
	Drilling oil and gas wells.....	37	2	166	943	156	352	870	1,949	819	254	2,565	457	(NA)	(NA)
1381	Karnes: Drilling oil and gas wells.....	26	2	160	983	148	329	875	1,535	934	158	2,478	149	(NA)	(NA)
1381	Refugio: Drilling oil and gas wells.....	32	1	137	774	128	271	710	1,431	949	150	2,378	152	(NA)	(NA)
1381	Victoria: Drilling oil and gas wells.....	33	-	88	505	82	181	458	1,501	880	78	2,323	136	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	36	3	239	1,561	208	485	1,290	2,892	970	289	3,931	220	(NA)	(NA)
	Survey, log, cement services subindustry..	10	2	136	963	126	286	866	2,003	682	206	2,713	178	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	26	1	103	598	82	199	424	889	288	83	1,218	42	(NA)	(NA)
1381	South Texas.....	659	46	3,679	20,657	3,237	7,137	17,567	41,871	18,922	5,277	60,844	5,226	(NA)	(NA)
1382	Drilling oil and gas wells.	293	27	1,856	10,858	1,691	3,730	9,432	22,382	10,696	2,789	33,001	2,866	(NA)	(NA)
	Oil and gas exploration services.....	59	1	233	1,239	189	418	953	1,938	557	375	2,563	307	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	307	18	1,590	8,560	1,357	2,989	7,182	17,551	7,669	2,113	25,280	2,053	(NA)	(NA)
	Survey, log, cement services subindustry....	77	9	636	4,398	589	1,320	4,021	9,678	3,573	1,164	13,278	1,137	(NA)	(NA)
	Miscellaneous oil and gas field services subindus- try.....	230	9	954	4,162	768	1,669	3,161	7,873	4,096	949	12,002	916	(NA)	(NA)

See footnotes at end of table.

**TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:**  
**1963 and 1958—Continued**

Code	Division, State, district, county, and industry	1963											1958		
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub-contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employ-ees on March 15	Receipts for services and shipments
		Total	With 20 employ-ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)							
	WEST SOUTH CENTRAL DIVISION—Continued														
	Texas—Continued														
	District and County—Con.														
138	Oil and gas field services—Con.														
	South Texas—Continued														
	Brooks.....	36	3	142	889	116	289	697	2,760	1,069	397	3,961	265	100	1,289
1381	Drilling oil and gas wells.....	14	2	72	385	55	136	287	1,687	626	260	2,424	149	(NA)	(NA)
1389	Oil and gas field service services, n.e.c.....	19	1	62	466	54	137	373	1,022	435	115	1,488	84	(NA)	(NA)
	Survey, log, cement services subindustry..	7	1	49	370	43	110	306	843	390	104	1,261	76	(NA)	(NA)
	Duval:														
1381	Drilling oil and gas wells.....	34	-	121	596	115	234	559	1,767	863	121	2,608	143	(NA)	(NA)
	Hidalgo.....	50	7	441	2,753	369	877	2,133	5,202	2,583	603	7,802	646	389	6,002
1381	Drilling oil and gas wells.....	19	4	236	1,384	217	527	1,229	2,308	1,285	312	3,582	323	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	24	3	172	1,195	126	295	773	2,666	1,244	310	3,941	279	(NA)	(NA)
	Jim Hogg.....	23	1	85	369	82	153	312	924	277	100	1,215	86	(NA)	(NA)
	Jim Wells:														
1381	Drilling oil and gas wells.....	40	6	301	1,788	277	565	1,515	2,854	1,210	370	3,982	452	(NA)	(NA)
1389	Oil and gas field services, n.e.c.: Survey, log, cement services subindustry..	10	3	158	1,087	149	319	1,010	3,009	987	332	4,042	286	(NA)	(NA)
	Nueces:														
1381	Drilling oil and gas wells.....	49	6	411	2,664	392	894	2,366	4,491	2,134	712	6,343	994	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	56	3	434	2,791	326	767	1,946	4,709	2,010	724	6,726	717	(NA)	(NA)
	Survey, log, cement services subindustry..	16	2	231	1,673	176	420	1,152	2,745	1,156	350	3,855	396	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	40	1	203	1,118	150	347	794	1,964	854	374	2,871	321	(NA)	(NA)
	San Patricio.....	71	3	323	1,615	297	671	1,411	3,148	1,484	437	4,667	402	(NA)	(NA)
1381	Drilling oil and gas wells.....	34	2	140	741	130	259	672	1,453	660	112	2,082	143	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	31	1	164	783	152	379	670	1,535	780	286	2,378	223	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	26	1	145	646	139	344	583	1,277	702	262	2,052	189	(NA)	(NA)
	Starr:														
1381	Drilling oil and gas wells.....	17	1	126	668	109	232	528	1,102	637	122	1,746	115	(NA)	(NA)
	Webb.....	33	1	95	395	82	158	373	727	303	61	1,021	70	(NA)	(NA)
	Willacy.....	16	-	43	211	40	79	154	547	265	63	775	100	89	507
	Zapata:														
1381	Drilling oil and gas wells.....	15	1	71	394	61	157	327	615	387	85	1,056	31	(NA)	(NA)
	Southwest Texas.....	311	12	1,098	4,892	958	2,012	4,027	10,868	5,021	1,363	15,379	1,873	(NA)	(NA)
1381	Drilling oil and gas wells.....	141	8	626	2,799	593	1,202	2,566	7,009	3,203	870	9,906	1,176	(NA)	(NA)
1382	Oil and gas exploration services.....	35	1	128	652	79	197	347	936	387	185	1,082	426	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	135	3	344	1,441	286	613	1,114	2,923	1,431	308	4,391	271	(NA)	(NA)
	Survey, log, cement services subindustry....	21	1	57	412	51	127	341	805	370	97	1,197	75	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	114	2	287	1,029	235	486	773	2,118	1,061	211	3,194	196	(NA)	(NA)
	Atascosa.....	38	3	206	809	181	290	666	1,653	813	166	2,468	164	(NA)	(NA)
1381	Drilling oil and gas wells.....	17	1	83	289	82	94	284	732	287	92	1,025	86	(NA)	(NA)

See footnotes at end of table.

**TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958—Continued**

Code	Division, State, district, county, and industry	1963											1958		
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub- contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expendi- tures	All employ- ees on March 15	Receipts for services and shipments
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
	WEST SOUTH CENTRAL DIVISION— Continued														
	Texas—Continued														
	District and County—Con.														
138	Oil and gas field services—Con.														
	Bexar.....	26	3	120	618	93	206	408	1,092	516	260	1,435	433	71	397
1381	Drilling oil and gas wells.....	14	2	80	373	75	161	345	626	349	143	1,045	73	(NA)	(NA)
	Caldwell.....	37	4	294	1,458	251	542	1,216	2,790	1,185	187	3,908	254	153	1,400
1381	Drilling oil and gas wells.....	15	3	194	979	178	371	869	2,046	828	50	2,794	130	(NA)	(NA)
	Dimmit.....	15	-	44	178	39	84	166	446	185	40	638	33	62	542
	Guadalupe.....	28	1	109	443	95	202	372	970	363	99	1,344	88	77	510
	La Salle.....	18	-	46	202	40	101	174	381	178	72	592	39	(NA)	(NA)
	McMullen.....	33	-	40	184	35	78	148	864	538	260	1,010	652	72	935
	Medina.....	7	-	33	190	31	81	184	418	195	38	615	36	(NA)	(NA)
	Wilson.....	18	-	28	112	24	58	93	351	167	68	551	35	(NA)	(NA)
	Zavala.....	13	-	29	111	28	64	106	365	234	29	582	46	(NA)	(NA)
138	Oil and gas field services:														
	North Central Texas A.....	646	38	3,040	13,535	2,639	5,370	11,604	30,079	12,530	2,053	41,075	3,587	(NA)	(NA)
1381	Drilling oil and gas wells.	317	25	1,810	8,048	1,653	3,295	7,332	19,075	7,393	1,156	25,079	2,545	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	304	13	1,185	5,271	950	1,985	4,104	10,637	5,011	891	15,528	1,011	(NA)	(NA)
	Survey, log, cement services subindustry....	44	3	250	1,713	199	512	1,336	4,074	1,994	513	6,002	579	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	260	10	935	3,558	751	1,473	2,768	6,563	3,017	378	9,526	432	(NA)	(NA)
	Archer:														
1381	Drilling oil and gas wells.....	41	2	147	568	144	309	549	1,324	560	111	1,824	171	(NA)	(NA)
	Clay:														
1381	Drilling oil and gas wells.....	19	1	67	296	66	140	286	847	251	30	1,065	63	(NA)	(NA)
	Cooke:														
1381	Drilling oil and gas wells.....	18	3	130	441	126	195	419	1,236	455	17	1,640	68	(NA)	(NA)
	Foard.....	9	-	24	149	24	47	149	379	161	60	535	45	(NA)	(NA)
	Hardeman:														
1382	Drilling oil and gas wells.....	12	2	61	357	60	120	348	1,164	478	142	1,768	16	(NA)	(NA)
	Jack:														
1381	Drilling oil and gas wells.....	32	2	188	686	178	344	643	2,347	772	137	2,920	336	(NA)	(NA)
	Montague:														
1381	Drilling oil and gas wells.....	27	3	194	1,011	177	351	892	2,293	789	66	2,759	389	(NA)	(NA)
	Wichita.....	108	6	553	2,702	493	1,057	2,273	5,761	2,648	404	7,823	990	640	6,042
1381	Drilling oil and gas wells.....	52	3	232	1,116	198	411	935	2,423	1,091	180	3,040	654	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	52	3	313	1,542	289	630	1,309	3,247	1,531	223	4,688	313	(NA)	(NA)
	Survey, log, cement services subindustry..	9	1	82	553	73	184	481	1,286	636	174	1,876	220	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	43	2	231	989	216	446	828	1,961	895	49	2,812	93	(NA)	(NA)
	Young:.....	94	5	469	1,947	412	806	1,650	4,449	2,028	294	6,223	548	(NA)	(NA)
1381	Drilling oil and gas wells.....	45	4	316	1,306	298	551	1,194	3,082	1,399	179	4,218	442	(NA)	(NA)
138	Oil and gas field services:														
	North Central Texas B.....	512	12	1,573	7,290	1,412	3,117	6,338	15,436	7,624	1,374	22,253	2,181	(NA)	(NA)
1381	Drilling oil and gas wells.	201	4	825	3,645	780	1,628	3,373	7,937	4,569	509	12,051	964	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	291	8	732	3,564	617	1,453	2,887	7,188	2,877	855	9,710	1,210	(NA)	(NA)
	Survey, log, cement services subindustry....	41	1	159	1,063	145	360	938	2,675	1,073	292	3,596	444	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	250	7	573	2,501	472	1,093	1,949	4,513	1,804	563	6,114	766	(NA)	(NA)
	Callahan.....	37	-	51	191	48	89	172	505	217	43	681	84	116	1,548
	Coleman.....	29	-	84	345	78	172	316	714	291	42	988	59	135	2,221
	Haskell.....	26	1	75	330	70	135	300	777	358	45	1,102	78	102	1,854
	Nolan:														
1381	Drilling oil and gas wells.....	12	-	59	275	57	106	262	809	541	43	1,359	34	(NA)	(NA)

See footnotes at end of table.



**TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued**

Code	Division, State, district, county, and industry	1963												1958	
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub- contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expendi- tures	All employ- ees on March 15	Receipts for services and shipments
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)						(\$1,000)	(\$1,000)
	WEST SOUTH CENTRAL DIVISION-- Continued														
	Texas--Continued														
	District and County--Con.														
138	Oil and gas field services--Con.														
	Shackelford.....	55	-	74	301	72	131	281	815	435	89	1,235	104	(NA)	(NA)
	Stephens.....	44	1	145	671	122	270	485	1,111	532	125	1,628	140	208	2,030
	Taylor:														
1381	Drilling oil and gas														
	wells.....	30	4	331	1,584	300	623	1,429	2,471	1,741	131	3,840	503	(NA)	(NA)
1389	Oil and gas field														
	services, n.e.c.....	39	2	188	1,179	153	387	910	2,828	1,211	294	3,805	528	(NA)	(NA)
	Survey, log, cement														
	services subindustry..	9	1	88	636	78	214	538	1,752	666	170	2,273	315	(NA)	(NA)
	Miscellaneous oil and														
	gas field services														
	subindustry.....	30	1	100	543	75	173	372	1,076	545	124	1,532	213	(NA)	(NA)
	Throckmorton.....	39	-	56	221	54	118	197	645	293	43	933	48	122	2,356
	East Texas A.....	256	18	1,899	11,029	1,679	3,564	9,179	15,635	8,882	1,787	24,098	2,206	(NA)	(NA)
1381	Drilling oil and gas wells.	109	11	1,247	7,383	1,096	2,193	6,264	9,399	6,811	1,347	15,759	1,798	(NA)	(NA)
1382	Oil and gas exploration														
	services.....	46	5	387	2,254	357	877	1,907	2,773	1,165	185	3,880	243	(NA)	(NA)
1389	Oil and gas field services,														
	n.e.c.....	101	2	265	1,392	226	494	1,008	3,463	906	255	4,459	165	(NA)	(NA)
	Miscellaneous oil and														
	gas field services														
	subindustry.....	83	2	224	1,092	192	414	784	3,181	771	202	4,067	87	(NA)	(NA)
	Dallas:														
1381	Drilling oil and gas														
	wells.....	11	5	378	2,268	312	603	1,569	3,799	1,931	531	5,693	568	(NA)	(NA)
1389	Oil and gas field														
	services, n.e.c.....	9	-	58	358	49	102	262	2,015	287	106	2,385	23	(NA)	(NA)
	Grayson:														
1381	Drilling oil and gas														
	wells.....	16	3	178	1,014	145	344	814	1,849	1,317	568	3,119	615	(NA)	(NA)
	Leon:														
1381	Drilling oil and gas														
	wells.....	14	1	64	333	64	129	333	821	613	82	1,315	201	(NA)	(NA)
	Tarrant.....	12	2	112	677	73	159	406	578	259	11	683	165	148	327
	Van Zandt:														
1381	Drilling oil and gas														
	wells.....	8	1	351	2,415	341	626	2,320	646	604	61	1,262	49	(NA)	(NA)
	East Texas B.....	470	31	2,507	12,741	2,221	4,618	10,844	24,854	10,949	2,225	35,307	2,721	(NA)	(NA)
1381	Drilling oil and gas wells.	175	10	912	4,521	862	1,708	4,219	9,324	5,396	833	14,274	1,279	(NA)	(NA)
1382	Oil and gas exploration														
	services.....	36	4	229	1,452	151	382	741	1,573	567	109	2,146	103	(NA)	(NA)
1389	Oil and gas field services,														
	n.e.c.....	259	17	1,366	6,768	1,208	2,528	5,884	13,957	4,986	1,283	18,887	1,339	(NA)	(NA)
	Survey, log, cement														
	services subindustry....	28	5	219	1,526	197	454	1,356	3,424	1,326	399	4,780	369	(NA)	(NA)
	Miscellaneous oil and														
	gas field services														
	subindustry.....	231	12	1,147	5,242	1,011	2,074	4,528	10,533	3,660	884	14,107	970	(NA)	(NA)
	Anderson:														
1381	Drilling oil and gas														
	wells.....	19	2	149	858	142	254	773	1,511	968	149	2,451	177	(NA)	(NA)
	Gregg:														
1381	Drilling oil and gas														
	wells.....	20	1	116	504	106	200	448	1,068	454	94	1,447	169	(NA)	(NA)
	Houston:														
1381	Drilling oil and gas														
	wells.....	9	1	50	329	49	128	322	823	401	113	1,208	129	(NA)	(NA)
	Panola.....	28	1	106	450	101	213	420	1,326	379	156	1,665	196	59	609
	Rusk.....	55	4	368	1,756	346	728	1,622	3,348	1,080	322	4,432	318	316	2,755

See footnotes at end of table.

TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued

Code	Division, State, district, county, and industry	1963												1958	
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub- contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expendi- tures	All employ- ees on March 15	Receipts for services and shipments
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)							
	WEST SOUTH CENTRAL DIVISION— Continued														
	Texas—Continued														
	District and County—Con.														
138	Oil and gas field services— Continued														
1381	Smith: Drilling oil and gas wells.....	15	3	147	706	144	266	671	854	660	25	1,260	279	(NA)	(NA)
	Titus.....	22	-	97	349	93	157	326	560	455	177	1,143	49	94	474
	Wood.....	35	4	212	909	197	406	816	1,941	1,047	108	2,913	183	(NA)	(NA)
1381	West Texas A.....	1,537	155	11,988	68,343	9,976	21,327	54,012	133,906	62,923	16,539	193,782	19,586	(NA)	(NA)
1382	Drilling oil and gas wells	609	69	4,971	27,741	4,427	8,937	24,033	57,426	36,513	7,297	92,197	9,039	(NA)	(NA)
	Oil and gas exploration services.....	103	9	617	3,800	553	1,400	3,081	5,364	2,282	685	7,518	813	(NA)	(NA)
1389	Oil and gas field services services, n.e.c.....	825	77	6,400	36,802	4,996	10,990	26,898	71,116	24,128	8,557	94,067	9,734	(NA)	(NA)
	Survey, log, cement services subindustry...	120	11	793	5,517	688	1,715	4,683	13,252	5,849	1,547	18,687	1,961	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	705	66	5,607	31,285	4,308	9,275	22,215	57,864	18,279	7,010	75,380	7,773	(NA)	(NA)
1381	Andrews.....	132	17	1,092	5,940	934	1,888	4,790	13,210	6,951	2,028	20,241	1,948	1,248	22,983
1389	Drilling oil and gas wells.....	38	7	450	2,687	391	745	2,204	6,088	4,630	1,144	10,744	1,118	(NA)	(NA)
	Oil and gas field services, n.e.c.....	86	10	625	3,145	527	1,105	2,489	6,956	2,221	875	9,241	811	(NA)	(NA)
	Survey, log, cement services subindustry.	6	2	54	400	42	105	291	1,202	542	171	1,735	180	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	80	8	571	2,745	485	1,000	2,198	5,754	1,679	704	7,506	631	(NA)	(NA)
1381	Crane.....	81	4	541	2,999	475	1,070	2,598	6,010	3,575	586	9,629	542	691	11,517
	Drilling oil and gas wells.....	39	2	282	1,561	255	558	1,332	3,050	2,361	236	5,401	246	(NA)	(NA)
1381	Dawson: Drilling oil and gas wells.....	22	4	203	1,188	190	326	1,083	2,477	1,333	241	3,949	102	(NA)	(NA)
1381	Ector.....	200	43	3,694	23,301	2,731	5,842	15,705	39,380	13,620	4,036	51,047	5,989	3,497	47,484
1389	Drilling oil and gas wells.....	72	17	1,011	5,808	909	1,915	4,913	8,940	4,713	1,205	12,562	2,296	(NA)	(NA)
	Oil and gas field services, n.e.c.....	121	26	2,669	17,400	1,812	3,907	10,741	30,163	8,873	2,795	38,177	3,654	(NA)	(NA)
	Survey, log, cement services subindustry.	15	2	194	1,374	152	415	1,072	4,296	1,725	470	6,017	474	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	106	24	2,475	16,026	1,660	2,492	9,669	25,867	7,148	2,325	32,160	3,180	(NA)	(NA)
1381	Gaines: Drilling oil and gas wells.....	35	4	240	1,539	215	473	1,312	3,333	2,191	494	5,247	771	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	53	4	254	1,389	237	489	1,193	3,020	1,065	515	3,931	669	(NA)	(NA)
	Garza.....	36	1	75	397	70	143	355	1,149	505	144	1,722	76	(NA)	(NA)
	Glasscock.....	19	-	23	133	21	44	117	440	187	19	632	14	(NA)	(NA)
1381	Howard: Drilling oil and gas wells.....	23	1	152	837	145	331	782	1,305	795	74	2,040	134	(NA)	(NA)
1381	Loving.....	29	-	115	433	85	156	391	832	751	89	1,602	70	84	1,294
	Drilling oil and gas wells.....	17	-	61	289	60	101	284	461	611	51	1,100	23	(NA)	(NA)

See footnotes at end of table.

**TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued**

Code	Division, State, district, county, and industry	1963												1958	
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub-contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expenditures	All employees on March 15	Receipts for services and shipments
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
	WEST SOUTH CENTRAL DIVISION—Continued														
	Texas—Continued														
	District and County—Con.														
138	Oil and gas field services—Con.														
	West Texas A—Continued														
	Martin.....	28	1	172	873	132	245	600	1,880	1,284	523	3,308	379	(NA)	(NA)
1381	Drilling oil and gas wells.....	15	1	154	803	116	219	548	1,726	1,227	492	3,084	361	(NA)	(NA)
	Midland.....	117	22	1,441	8,504	1,176	2,527	6,638	14,192	7,291	1,945	20,521	2,907	1,062	9,446
1381	Drilling oil and gas wells.....	53	11	817	4,961	751	1,503	4,322	9,594	5,406	1,364	14,498	1,866	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	48	7	415	2,467	293	689	1,651	3,929	1,709	508	5,266	880	(NA)	(NA)
	Mitchell:														
1381	Drilling oil and gas wells.....	13	-	33	134	33	51	134	828	339	50	1,114	103	(NA)	(NA)
	Pecos:														
1381	Drilling oil and gas wells.....	39	4	226	1,445	202	430	1,253	3,905	3,691	699	7,655	640	(NA)	(NA)
1382	Oil and gas exploration services.....	11	1	81	421	74	187	372	1,056	477	17	1,485	65	(NA)	(NA)
	Reeves:														
1381	Drilling oil and gas wells.....	19	1	92	458	84	164	401	2,465	990	187	3,458	184	(NA)	(NA)
1382	Oil and gas exploration services.....	13	2	110	676	102	274	623	783	371	171	1,166	159	(NA)	(NA)
	Scurry:														
1381	Drilling oil and gas wells.....	22	2	120	616	114	213	571	1,291	708	22	1,932	89	(NA)	(NA)
	Sterling.....	15	-	30	95	28	56	81	112	514	53	598	81	(NA)	(NA)
	Ward.....	91	15	805	4,549	711	1,681	3,582	9,288	3,672	897	12,980	877	543	10,333
1381	Drilling oil and gas wells.....	34	5	239	1,360	231	466	1,291	2,749	1,211	122	3,969	113	(NA)	(NA)
	Winkler.....	69	10	628	3,429	564	1,242	2,939	7,011	3,877	746	11,146	488	970	16,901
1381	Drilling oil and gas wells.....	30	4	240	1,368	220	487	1,187	2,953	2,137	217	5,113	194	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	34	6	361	1,927	320	693	1,654	3,900	1,702	475	5,787	290	(NA)	(NA)
	Yoakum:														
1381	Drilling oil and gas wells.....	26	3	179	1,103	167	348	982	1,898	1,288	249	3,035	400	(NA)	(NA)
138	Oil and gas field services:														
	West Texas B.....	325	18	1,513	8,969	1,390	3,080	7,731	20,210	10,074	2,517	29,405	3,396	(NA)	(NA)
1381	Drilling oil and gas wells.....	148	12	913	5,606	854	1,874	5,106	13,868	7,196	1,730	20,013	2,781	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	159	6	562	3,137	500	1,112	2,441	6,045	2,451	724	8,637	583	(NA)	(NA)
	Survey, log, cement services subindustry...	20	1	120	998	100	249	694	2,313	1,081	311	3,545	160	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	139	5	442	2,139	400	863	1,747	3,732	1,370	413	5,092	423	(NA)	(NA)
	Crockett:														
1381	Drilling oil and gas wells.....	24	1	87	464	85	165	451	2,255	1,130	382	2,832	935	(NA)	(NA)
	Reagan:														
1389	Oil and gas field services, n.e.c.....	16	-	64	259	58	123	212	664	240	38	907	35	(NA)	(NA)
	Runnels.....	43	1	199	982	184	409	886	2,839	1,154	230	3,818	405	226	3,526
1381	Drilling oil and gas wells.....	18	1	100	510	96	212	478	1,649	790	62	2,244	257	(NA)	(NA)
	Schleicher:														
1381	Drilling oil and gas wells.....	8	1	60	484	59	168	474	888	317	167	1,127	245	(NA)	(NA)
	Sutton.....	9	-	3	13	3	6	13	643	250	109	719	283	61	1,234
	Terrell.....	7	2	80	460	70	121	364	445	679	92	1,213	3	(NA)	(NA)

See footnotes at end of table.

**TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued**

Code	Division, State, district, county, and industry	1963											1958		
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub- contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expendi- tures	All employ- ees on March 15	Receipts for services and shipments
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)							
	WEST SOUTH CENTRAL DIVISION— Continued														
	<u>Texas</u> —Continued														
	District and County—Con.														
138	Oil and gas field services— Continued														
	West Texas B—Continued														
1381	Tom Green.....	32	3	220	1,226	174	363	886	1,894	1,035	340	2,829	440	(NA)	(NA)
	Drilling oil and gas wells.....	18	2	173	938	156	322	802	1,666	948	288	2,493	409	(NA)	(NA)
1381	Upton:														
1389	Drilling oil and gas wells.....	30	4	251	1,660	235	569	1,489	3,687	1,562	439	5,229	459	(NA)	(NA)
	Oil and gas field services, n.e.c.: Survey, log, cement services subindustry.	4	1	66	501	57	148	414	1,168	569	155	1,817	75	(NA)	(NA)
	Texas Panhandle.....	342	26	2,040	11,706	1,824	4,169	10,104	22,703	12,252	2,917	35,061	2,811	(NA)	(NA)
1381	Drilling oil and gas wells	138	13	969	5,634	876	1,931	5,060	10,896	6,954	729	17,257	1,322	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	187	13	1,045	5,927	924	2,191	4,908	11,543	5,159	2,175	17,418	1,459	(NA)	(NA)
	Survey, log, cement services subindustry...	15	3	174	1,278	148	360	918	3,299	1,465	434	4,931	267	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	172	10	871	4,649	776	1,831	3,990	8,244	3,694	1,741	12,487	1,192	(NA)	(NA)
1381	Gray.....	68	5	426	2,157	374	853	1,802	4,309	1,501	472	5,823	459	442	5,766
1389	Drilling oil and gas wells.....	23	2	168	722	149	325	635	1,347	445	43	1,732	103	(NA)	(NA)
	Oil and gas field services, n.e.c.....	41	3	251	1,397	218	514	1,130	2,882	1,010	426	3,969	349	(NA)	(NA)
	Survey, log, cement services subindustry.	5	2	60	421	54	122	314	979	342	132	1,370	83	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	36	1	191	976	164	392	816	1,903	668	294	2,599	266	(NA)	(NA)
	Hemphill.....	11	-	8	35	5	12	23	421	271	43	689	46	(NA)	(NA)
1389	Hutchinson:														
	Oil and gas field services, n.e.c.....	31	5	271	1,706	238	634	1,478	2,543	1,375	1,036	4,297	657	(NA)	(NA)
1381	Lipscomb.....	23	2	120	772	106	238	653	1,270	864	310	2,037	407	105	1,637
	Drilling oil and gas wells.....	14	2	97	622	86	198	533	1,002	715	270	1,611	376	(NA)	(NA)
	Moore.....	16	-	58	288	52	111	253	424	158	64	618	28	(NA)	(NA)
1381	Ochiltree: Drilling oil and gas wells.....	21	5	275	1,826	250	488	1,591	3,059	2,293	146	5,296	202	(NA)	(NA)
	Undistributed by district and county.....	253	14	1,650	4,894	1,180	2,733	6,175	15,139	6,386	2,266	21,202	2,589	7,314	135,085
	MOUNTAIN DIVISION														
138	Oil and gas field services....	1,975	137	11,138	65,666	10,055	22,041	56,236	136,040	68,018	19,769	202,036	21,791	11,745	198,453
1381	Drilling oil and gas wells....	718	81	5,545	34,872	5,137	11,239	30,562	71,207	41,592	11,807	110,769	13,837	(NA)	(NA)
1382	Oil and gas exploration services.....	335	10	1,218	6,423	1,055	2,351	5,196	12,555	5,653	1,172	18,283	1,097	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	922	46	4,375	24,371	3,863	8,451	20,478	52,278	20,773	6,790	72,984	6,857	(NA)	(NA)
	Survey, log, cement services subindustry.....	156	12	880	6,350	775	1,907	5,408	18,113	7,386	2,155	25,223	2,431	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.	766	34	3,495	18,021	3,088	6,544	15,070	34,165	13,387	4,635	47,761	4,426	(NA)	(NA)
	<u>Montana</u>														
1381	Drilling oil and gas wells....	81	12	684	4,466	636	1,457	3,843	8,892	5,883	1,130	14,310	1,595	(NA)	(NA)
1382	Oil and gas exploration services.....	52	2	190	937	154	320	682	1,891	757	192	2,711	129	(NA)	(NA)
1389	Oil and gas field services, n.e.c.: Survey, log, cement services subindustry.....	25	2	119	826	99	229	601	1,880	1,105	190	3,036	139	(NA)	(NA)

See footnotes at end of table.

**TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued**

Code	Division, State, district, county, and industry	1963											1958		
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub- contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expendi- tures	All employ- ees on March 15	Receipts for services and shipments
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)						(\$1,000)	(\$1,000)
	MOUNTAIN DIVISION—Con.														
	<u>Montana—Continued</u>														
	County														
138	Oil and gas field services—Con.														
1381	Dawson: Drilling oil and gas wells	8	1	56	373	54	124	354	823	401	106	1,212	118	(NA)	(NA)
1381	Fallon: Drilling oil and gas wells	8	4	169	1,173	147	377	953	2,554	1,696	329	4,135	444	(NA)	(NA)
1381	Musselshell..... Drilling oil and gas wells	15 4	1 -	85 41	467 306	76 37	168 93	407 265	1,012 660	592 452	67 33	1,565 1,053	106 92	43 (NA)	1,060 (NA)
	Roosevelt.....	15	2	65	443	56	153	363	623	377	109	1,035	74	(NA)	(NA)
1381	Sheridan: Drilling oil and gas wells	3	2	48	349	43	117	306	703	435	102	1,006	234	(NA)	(NA)
1381	Toole: Drilling oil and gas wells	6	-	32	146	31	47	142	309	291	45	571	74	(NA)	(NA)
1381	Yellowstone..... Drilling oil and gas wells	12 7	1 1	129 105	665 537	107 93	202 180	491 454	1,154 1,075	592 580	136 136	1,716 1,626	166 165	(NA) (NA)	(NA) (NA)
	Undistributed by county.....	37	2	147	767	128	254	568	1,361	560	116	1,922	115	223	2,355
	<u>Wyoming</u>														
138	Oil and gas field services....	528	30	2,548	16,061	2,230	5,113	13,768	34,349	17,949	4,545	50,781	6,062	2,446	41,747
1381	Drilling oil and gas wells..	205	17	1,290	8,607	1,149	2,705	7,626	17,084	10,554	2,671	26,586	3,723	(NA)	(NA)
1382	Oil and gas exploration services.....	82	1	325	1,690	274	587	1,315	3,683	1,976	315	5,658	316	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	241	12	933	5,764	807	1,821	4,827	13,582	5,419	1,559	18,537	2,023	(NA)	(NA)
	Survey, log, cement service subindustry.....	34	4	230	1,647	205	512	1,474	5,440	2,188	624	7,322	930	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	207	8	703	4,117	602	1,309	3,353	8,142	3,231	935	11,215	1,093	(NA)	(NA)
	County														
138	Oil and gas field services:														
1381	Campbell: Drilling oil and gas wells	15	4	271	1,861	242	559	1,637	3,190	1,919	94	4,705	498	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	18	2	117	731	92	186	545	1,919	879	328	2,850	276	(NA)	(NA)
1381	Crook..... Drilling oil and gas wells	16 8	1 1	142 110	952 732	131 105	300 242	854 682	1,347 821	810 601	83 29	2,145 1,419	95 32	(NA) (NA)	(NA) (NA)
1381	Fremont: Drilling oil and gas wells	20	3	137	992	125	313	889	2,277	1,449	760	3,488	998	(NA)	(NA)
1381	Hot Springs..... Drilling oil and gas wells	29 15	1 1	95 50	574 287	89 47	170 81	498 257	1,181 668	482 391	166 107	1,660 1,033	169 133	88 (NA)	1,645 (NA)
1381	Laramie: Drilling oil and gas wells	4	1	79	395	79	195	395	950	527	299	1,486	290	(NA)	(NA)
1381	Natrona: Drilling oil and gas wells	32	2	174	1,264	154	381	1,081	2,024	1,020	295	2,883	456	(NA)	(NA)
1389	Oil and gas field service, n.e.c.: Survey, log, cement service subindustry....	5	1	54	392	49	132	352	930	361	80	1,171	200	(NA)	(NA)
1381	Park: Drilling oil and gas wells	14	-	95	762	89	242	681	1,066	757	236	1,823	236	(NA)	(NA)
1381	Sublette: Drilling oil and gas wells	7	1	71	576	65	164	518	1,247	584	52	1,846	37	(NA)	(NA)
1382	Oil and gas exploration services.....	3	-	35	169	28	60	123	788	669	80	1,454	83	(NA)	(NA)
1381	Sweetwater: Drilling oil and gas wells	16	2	97	675	84	171	551	1,544	1,228	147	2,666	253	(NA)	(NA)
	Undistributed by county.....	47	1	179	814	155	320	656	1,615	789	125	2,372	157	254	3,216

See footnotes at end of table.

TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued

Code	Division, State, district, county, and industry	1963											1958		
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub- contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expendi- tures	All employ- ees on March 15	Receipts for services and shipments
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)							
	MOUNTAIN DIVISION—Con. Colorado														
138	Oil and gas field services....	374	8	1,274	8,011	1,105	2,476	6,452	15,828	6,904	2,125	22,596	2,261	1,602	22,596
1381	Drilling oil and gas wells..	154	5	667	4,470	580	1,347	3,564	10,360	4,953	1,204	14,958	1,559	(NA)	(NA)
1382	Oil and gas exploration services.....	62	-	210	1,043	193	378	922	1,466	619	210	2,118	177	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	158	3	397	2,498	332	751	1,966	4,002	1,332	711	5,520	525	(NA)	(NA)
	Survey, log, cement services subindustry....	30	2	139	988	97	233	636	1,688	688	192	2,407	161	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	128	1	258	1,510	235	518	1,330	2,314	644	519	3,113	364	(NA)	(NA)
	County														
	Baca.....	7	-	38	255	37	86	243	524	608	11	1,126	17	(NA)	(NA)
	Boulder.....	4	-	23	146	22	51	145	388	108	67	545	18	(NA)	(NA)
	Denver.....	22	2	142	968	101	205	540	1,195	384	45	1,455	169	183	467
1381	Drilling oil and gas wells	14	1	88	651	66	125	343	962	351	43	1,237	119	(NA)	(NA)
	Jackson.....	7	-	32	210	31	73	204	328	228	49	551	54	(NA)	(NA)
	Logan: Drilling oil and gas wells	13	-	59	379	54	110	334	715	302	87	1,057	47	(NA)	(NA)
1381	Moffat: Drilling oil and gas wells	14	1	64	427	62	155	405	1,280	698	126	1,854	250	(NA)	(NA)
	Montezuma.....	11	-	36	214	34	76	188	842	366	67	1,238	37	75	1,119
1381	Morgan: Drilling oil and gas wells	9	-	66	398	54	127	310	904	499	29	1,312	120	(NA)	(NA)
1381	Washington: Drilling oil and gas wells	6	-	37	251	31	83	198	1,402	557	115	1,958	116	(NA)	(NA)
	Weld.....	24	-	49	315	33	71	184	633	281	71	902	83	52	656
	Undistributed by county....	53	1	181	960	163	302	832	1,174	437	133	1,655	89	266	4,059
	New Mexico														
138	Oil and gas field services....	594	70	5,149	28,090	4,673	9,828	24,448	56,580	28,493	9,211	84,819	9,465	5,478	94,468
1381	Drilling oil and gas wells..	205	42	2,614	15,050	2,433	4,985	13,585	28,452	17,124	5,580	45,290	5,866	(NA)	(NA)
1382	Oil and gas exploration services.....	68	5	307	1,763	277	680	1,492	3,270	1,438	256	4,769	195	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	321	23	2,228	11,277	1,963	4,163	9,371	24,858	9,931	3,375	34,760	3,404	(NA)	(NA)
	Survey, log, cement services subindustry....	44	5	369	2,699	322	816	2,265	7,887	3,220	968	11,023	1,052	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	277	18	1,859	8,578	1,641	3,347	7,106	16,971	6,711	2,407	23,737	2,352	(NA)	(NA)
	District and County														
	East New Mexico.....	410	53	3,735	20,214	3,429	7,145	17,919	40,956	20,878	6,794	61,848	6,780	(NA)	(NA)
1381	Drilling oil and gas wells	143	34	1,889	11,226	1,777	3,703	10,355	21,720	13,500	4,240	35,271	4,189	(NA)	(NA)
1382	Oil and gas exploration services.....	40	1	134	758	120	291	647	1,680	907	105	2,557	135	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	227	18	1,712	8,230	1,532	3,151	6,917	17,556	6,471	2,449	24,020	2,456	(NA)	(NA)
	Survey, log, cement services subindustry...	35	4	259	1,901	228	571	1,593	5,792	2,295	691	7,914	864	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	192	14	1,453	6,329	1,304	2,580	5,324	11,764	4,176	1,758	16,106	1,592	(NA)	(NA)
	Chaves.....	42	-	109	482	98	210	400	1,172	522	150	1,700	144	94	1,873
1381	Drilling oil and gas wells.....	15	-	51	222	47	102	194	696	330	67	1,046	47	(NA)	(NA)
	Eddy.....	115	10	680	3,627	632	1,246	3,264	7,802	4,128	1,451	11,580	1,801	(NA)	(NA)
1381	Drilling oil and gas wells.....	44	8	394	2,053	374	677	1,902	4,617	2,919	893	7,191	1,238	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	61	2	236	1,268	214	467	1,090	2,894	1,095	537	3,972	554	(NA)	(NA)
	Survey, log, cement services subindustry.	11	1	42	289	37	90	236	897	376	116	1,230	159	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	50	1	194	979	177	377	854	1,997	719	421	2,742	395	(NA)	(NA)

See footnotes at end of table.

**TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued**

Code	Division, State, district, county, and industry	1963											1958		
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub- contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expendi- tures	All employ- ees on March 15	Receipts for services and shipments
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
	MOUNTAIN DIVISION--Con.														
	New Mexico--Continued														
	Oil and gas field services--Con.														
	Lea:														
1381	Drilling oil and gas wells.....	71	24	1,336	8,228	1,256	2,672	7,591	15,439	9,463	3,115	25,237	2,780	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	123	16	1,378	6,520	1,229	2,516	5,449	13,679	5,063	1,692	18,749	1,685	(NA)	(NA)
	Survey, log, cement services subindustry	18	3	196	1,509	174	456	1,255	4,659	1,805	543	6,331	676	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	105	13	1,182	5,011	1,055	2,060	4,194	9,020	3,258	1,149	12,418	1,009	(NA)	(NA)
1381	Roosevelt.....	25	2	116	763	110	269	701	1,230	810	247	2,071	216	(NA)	(NA)
	Drilling oil and gas wells.....	11	2	103	710	98	247	655	921	747	164	1,710	122	(NA)	(NA)
1381	West New Mexico.....	125	12	972	5,928	835	1,939	4,875	11,576	5,859	1,993	17,278	2,150	(NA)	(NA)
	Drilling oil and gas wells.....	54	6	528	3,192	463	1,027	2,658	5,673	2,892	1,294	8,432	1,427	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	58	4	384	2,372	316	758	1,888	5,507	2,795	685	8,289	698	(NA)	(NA)
	Survey, log, cement services subindustry..	9	1	110	798	94	245	672	2,095	925	277	3,109	188	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	49	3	274	1,574	222	513	1,216	3,412	1,870	408	5,180	510	(NA)	(NA)
1381	Rio Arriba:														
	Drilling oil and gas wells.....	8	1	77	468	66	149	379	1,281	476	590	1,783	564	(NA)	(NA)
1381	San Juan:														
	Drilling oil and gas wells.....	39	5	447	2,679	390	866	2,265	4,307	2,382	704	6,533	860	(NA)	(NA)
	Undistributed by district or county.....	59	5	442	1,948	409	744	1,654	4,048	1,756	424	5,693	535	763	9,713
	Arizona														
138	Oil and gas field services...	40	-	51	247	47	98	215	837	380	93	1,238	72	(NA)	(NA)
	County														
138	Oil and gas field services:														
	Apache.....	16	-	5	30	4	9	24	380	173	61	571	43	(NA)	(NA)
	Undistributed by county....	11	-	17	100	15	29	86	275	101	24	385	15	(NA)	(NA)
	Utah														
1381	Drilling oil and gas wells...	58	6	399	2,448	349	779	2,047	6,095	3,191	1,085	9,386	985	(NA)	(NA)
1382	Oil and gas exploration services.....	48	2	156	831	139	342	698	1,714	680	137	2,313	218	(NA)	(NA)
1389	Oil and gas field services, n.e.c.:														
	Survey, log, cement services subindustry.....	13	1	48	355	43	113	307	1,038	505	138	1,592	89	(NA)	(NA)
	County														
138	Oil and gas field services:														
	Duchesne.....	9	1	60	411	55	139	372	697	507	58	1,178	84	(NA)	(NA)
	Emery.....	11	1	36	176	34	91	162	442	177	31	616	34	(NA)	(NA)
	Grand.....	23	1	118	572	104	183	466	1,592	601	353	2,253	293	60	1,413
1381	Drilling oil and gas wells.....	8	1	90	410	78	114	326	1,238	460	299	1,747	250	(NA)	(NA)
1381	San Juan:														
	Drilling oil and gas wells.....	12	2	127	839	107	257	660	1,848	981	205	2,787	247	(NA)	(NA)
1381	Uintah:														
	Drilling oil and gas wells.....	10	1	85	562	78	185	500	1,321	576	389	2,094	192	(NA)	(NA)
1389	Oil and gas field services, n.e.c.:														
	Survey, log, cement services subindustry..	5	1	51	390	44	116	324	1,128	552	153	1,726	107	(NA)	(NA)
	Undistributed by county....	32	1	101	595	86	195	482	1,238	880	63	2,028	153	271	3,061

See footnotes at end of table.

**TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued**

Code	Division, State, district, county, and industry	1963											1958		
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub- contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expendi- tures	All employ- ees on March 15	Receipts for services and shipments
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
	MOUNTAIN DIVISION--Con.														
	<u>Nevada</u>														
138	Oil and gas field services....	18	-	27	128	12	25	53	564	201	103	784	84	(NA)	(NA)
	PACIFIC DIVISION														
138	Oil and gas field services....	762	130	7,496	52,460	6,443	12,778	43,231	97,646	35,412	13,989	132,309	14,738	7,335	86,253
1381	Drilling oil and gas wells..	274	70	3,111	23,962	2,803	5,564	20,891	40,263	16,438	7,665	57,040	7,326	(NA)	(NA)
1382	Oil and gas exploration services.....	67	15	1,111	7,017	976	1,851	5,370	18,547	4,162	2,371	22,909	2,171	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	421	45	3,274	21,481	2,664	5,363	16,970	38,836	14,812	3,953	52,360	5,241	(NA)	(NA)
	Survey, log, cement services subindustry....	141	10	725	5,252	597	1,446	4,278	12,321	5,153	1,433	16,806	2,101	(NA)	(NA)
	Miscellaneous oil and gas field services.....	280	35	2,549	16,229	2,067	3,917	12,692	26,515	9,659	2,520	35,554	3,140	(NA)	(NA)
	subindustry.....														
	<u>Washington</u>														
138	Oil and gas field services....	20	22	114	592	105	236	532	888	311	67	1,067	199	(NA)	(NA)
	<u>California</u>														
138	Oil and gas field services....	696	114	6,656	46,529	5,675	11,130	37,988	79,192	29,689	11,740	108,512	12,109	7,052	82,522
1381	Drilling oil and gas wells..	256	62	2,863	21,692	2,573	5,028	18,838	35,313	14,745	6,870	50,456	6,472	(NA)	(NA)
1382	Oil and gas exploration services.....	45	9	657	4,458	551	1,002	3,062	7,880	1,341	1,135	9,529	827	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	395	43	3,136	20,379	2,551	5,100	16,088	35,999	13,603	3,735	48,527	4,810	(NA)	(NA)
	Survey, log, cement services subindustry....	127	9	668	4,871	553	1,341	3,998	10,990	4,563	1,344	14,905	1,992	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	268	34	2,468	15,508	1,998	3,759	12,090	25,009	9,040	2,391	33,622	2,818	(NA)	(NA)
	County														
138	Oil and gas field services:														
	Colusa.....	17	-	27	215	25	54	204	690	426	62	1,149	29	(NA)	(NA)
	Contra Costa.....	17	1	62	563	51	120	452	1,301	589	139	1,949	78	(NA)	(NA)
1381	Drilling oil and gas wells	8	1	49	472	41	99	394	1,012	451	102	1,541	24	(NA)	(NA)
	Fresno:														
1381	Drilling oil and gas wells	17	4	191	1,281	173	293	1,099	1,538	654	198	2,149	241	(NA)	(NA)
	Glenn.....	13	-	16	110	15	32	105	430	177	32	636	3	149	2,268
	Kern.....	136	34	1,674	11,727	1,499	3,020	10,091	22,274	8,861	3,415	30,482	4,068	1,257	17,467
1381	Drilling oil and gas wells	47	21	850	6,370	781	1,587	5,570	10,995	4,370	2,245	15,382	2,228	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	83	12	785	5,122	683	1,359	4,348	11,054	4,460	1,156	14,846	1,824	(NA)	(NA)
	Survey, log, cement services subindustry...	20	3	214	1,499	176	408	1,239	4,104	1,737	525	5,673	693	(NA)	(NA)
	Miscellaneous oil and gas field services.....	63	9	571	3,623	507	951	3,109	6,950	2,723	631	9,173	1,131	(NA)	(NA)
	subindustry.....														
	Los Angeles.....	118	28	1,847	13,945	1,378	2,949	9,850	19,361	6,537	2,777	24,119	4,556	2,619	23,019
1381	Drilling oil and gas wells	36	12	671	5,158	585	1,182	4,253	8,795	3,354	1,918	10,996	3,071	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	78	15	1,105	8,119	780	1,742	5,509	10,461	3,135	859	12,975	1,480	(NA)	(NA)
	Survey, log, cement services subindustry...	18	4	223	1,658	172	446	1,264	2,662	740	263	3,023	642	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	60	11	882	6,461	608	1,296	4,245	7,799	2,395	596	9,952	838	(NA)	(NA)
	Monterey.....	11	1	33	308	31	71	290	584	275	37	871	25	(NA)	(NA)
	Orange.....	42	8	454	3,524	412	859	3,141	4,579	1,766	465	6,422	388	343	4,307
1381	Drilling oil and gas wells	15	4	203	1,829	182	395	1,616	1,938	594	261	2,623	170	(NA)	(NA)
	Sacramento.....	14	-	14	90	12	20	77	450	102	34	537	49	(NA)	(NA)
	Santa Barbara:														
1381	Drilling oil and gas wells	15	3	134	705	132	175	690	1,626	407	198	2,128	103	(NA)	(NA)
	Solano.....	18	2	85	835	69	196	688	1,581	624	189	2,251	143	(NA)	(NA)
1381	Drilling oil and gas wells	9	1	43	522	39	116	465	768	281	113	1,062	100	(NA)	(NA)

See footnotes at end of table.



TABLE 2B. General Statistics Based on Location of Work, by Geographic Areas:  
1963 and 1958--Continued

Code	Division, State, district, county, and industry	1963											1958		
		County establishments <sup>1</sup>		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, purchased energy, and sub- contract work	Cost of purchased machinery installed	Receipts for services and shipments	Capital expendi- tures	All employ- ees on March 15	Receipts for services and shipments
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)							
	PACIFIC DIVISION—Con. <u>California</u> —Continued County—Continued														
1381	Sutter: Drilling oil and gas wells	5	1	27	201	16	44	177	317	102	92	503	8	(NA)	(NA)
1381	Ventura.....	60	13	645	4,670	552	1,067	3,878	7,161	2,674	1,578	10,666	747	1,137	14,340
1389	Drilling oil and gas wells	16	7	328	2,604	293	528	2,247	2,976	1,467	1,130	5,314	259	(NA)	(NA)
	Oil and gas field services, n.e.c.....	41	5	279	1,861	228	476	1,480	4,049	1,194	434	5,202	475	(NA)	(NA)
	Survey, log, cement services subindustry...	13	1	64	527	54	136	423	1,218	540	149	1,669	238	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	28	4	215	1,334	174	340	1,057	2,831	654	285	3,533	237	(NA)	(NA)
	Yolo.....	20	-	30	202	22	56	128	555	226	116	830	67	(NA)	(NA)
1382	Offshore.....	13	2	381	2,610	332	527	2,093	7,227	2,276	1,535	10,328	710	194	3,528
	Oil and gas exploration services.....	4	2	352	2,345	305	473	1,853	6,216	881	1,027	7,456	668	(NA)	(NA)
	Undistributed by county.....	33	4	393	1,596	381	525	1,469	3,208	1,119	150	4,317	160	583	6,961
	<u>Alaska</u>														
138	Oil and gas field services....	39	13	672	5,092	611	1,286	4,479	17,247	5,343	2,151	22,334	2,407	255	3,156
1381	Drilling oil and gas wells..	12	7	205	2,005	191	460	1,828	4,435	1,487	774	5,854	842	(NA)	(NA)
1382	Oil and gas exploration services.....	12	4	337	2,014	313	577	1,796	10,093	2,720	1,159	12,710	1,262	(NA)	(NA)
1389	Oil and gas field services, n.e.c.....	15	2	130	1,073	107	249	855	2,719	1,136	218	3,770	303	(NA)	(NA)
	Survey, log, cement services subindustry....	5	1	49	352	38	91	253	1,213	570	89	1,839	33	(NA)	(NA)
	Miscellaneous oil and gas field services subindustry.....	10	1	81	721	69	158	602	1,506	566	129	1,931	270	(NA)	(NA)
	County														
	Offshore.....	6	1	53	517	50	117	473	5,443	863	822	6,726	402	(NA)	(NA)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosure of data for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>The figures for number of "county establishments" represent the number of operations in separate counties as indicated by the county figures included in reports received. The latter reports usually represented all operations of each company in the United States. The figures for number of establishments shown elsewhere represent the number of such reports received.

<sup>2</sup>Excludes figures for Alaska.

TABLE 3A. Detailed Statistics for Industries, by Geographic Areas: 1963—Continued

Item	138- Oil and gas field services industries, total	1381.—Drilling oil and gas wells industry											
		United States, total	Middle Atlantic		East North Central				West North Central			South Atlantic	
			Division	Pennsyl- vania	Division	Ohio	Illinois	Michigan	Division	Nebraska	Kansas	Division	West Virginia
Establishments, total.....number..	6,212	2,836	106	88	327	110	127	42	242	20	205	129	12
With 0 to 19 employees.....do....	4,964	2,090	100	82	293	101	111	38	203	16	174	116	11
With 20 to 99 employees.....do....	1,101	660	6	6	32	9	15	3	39	4	31	13	1
With 100 employees and over.....do....	147	86	-	-	2	-	1	1	-	-	-	-	-
Receipts for services and shipments....\$1,000..	1,817,894	979,316	10,257	8,978	43,236	13,613	15,602	10,263	46,482	5,333	36,732	15,977	15,42
Actual services and shipments in the specified State by contractors classified in all States as percent of above receipts.....	(X)	(X)	92	90	100	110	89	96	108	108	103	107	10
Value added in mining services.....\$1,000..	1,241,354	653,337	6,805	5,872	31,469	9,700	11,118	8,061	33,423	3,553	25,954	10,805	10,50
Persons in industry, total.....number..	116,117	56,951	761	648	3,254	904	1,341	610	2,892	235	2,416	1,183	1,15
Production, development, and exploration workers.....do....	96,593	50,333	613	532	2,844	759	1,173	568	2,420	196	2,013	992	96
All other employees.....do....	15,780	5,083	59	46	199	66	81	24	333	31	275	98	9
Proprietors and firm members.....do....	3,744	1,535	89	70	211	79	87	18	139	8	128	93	9
Performing manual labor.....do....	2,922	1,119	79	62	172	62	75	14	99	4	92	77	7
Man-hours worked by production, development, and exploration workers, total.....1,000..	206,588	106,266	1,458	1,278	5,357	1,559	2,252	965	4,795	362	3,929	2,146	2,09
Operating and maintaining wells.....do....	17,705	7,408	148	142	363	50	270	7	245	7	201	62	3
Drilling wells and rig building.....do....	92,149	89,628	1,254	1,080	4,643	1,435	1,805	936	4,020	349	3,242	1,982	1,95
Exploration work (except drilling).....do....	18,064	1,061	-	-	86	38	46	-	120	3	116	17	1
Other work.....do....	78,670	8,169	56	56	265	36	131	22	410	3	370	85	8
Principal expenses designated below, total.....\$1,000..	1,248,418	676,474	7,225	6,270	27,311	8,345	10,442	5,864	29,415	3,210	23,500	10,818	10,38
Wages of production, development, and exploration workers.....do....	517,393	281,064	3,161	2,693	13,406	4,008	4,946	3,223	11,402	998	9,177	4,593	4,47
Salaries of all other employees.....do....	114,334	37,086	259	187	846	263	327	124	2,137	238	1,786	570	54
Supplies and purchases for resale.....do....	440,294	232,349	2,789	2,448	9,172	2,943	3,719	1,564	9,605	1,133	7,660	4,250	4,02
Fuel purchased.....do....	71,189	41,711	517	482	2,032	529	844	453	2,087	163	1,741	542	50
Electric energy purchased.....do....	4,255	2,211	19	17	181	27	117	24	296	4	290	35	3
Subcontract work.....do....	100,953	82,053	480	443	1,674	575	489	476	3,888	674	2,846	828	80
Purchased machinery installed.....do....	187,755	115,681	493	467	2,510	910	853	511	2,871	311	2,436	1,098	1,05
Capital expenditures, total.....do....	227,906	148,026	846	751	3,802	1,071	1,538	826	5,688	505	4,195	1,541	1,51
Development and exploration of mineral properties.....do....	12,699	12,351	86	86	321	172	85	63	1,681	162	1,058	7	9
New structures and additions.....do....	21,829	13,542	41	39	91	13	51	23	637	1	628	90	9
New machinery and equipment.....do....	157,005	92,633	650	567	2,556	604	1,081	628	2,518	135	1,873	1,099	1,06
Used plant and equipment.....do....	36,373	29,500	69	59	834	282	321	112	852	207	636	345	34
Energy used <sup>1</sup> .....million kwh. equivalent..	24,471	18,103	140	127	713	273	212	128	795	67	660	186	17
Fuels produced and used for fuel at same establishment:													
Crude petroleum.....1,000 barrels..	5	5	-	-	-	-	-	-	5	-	5	-	-
Natural gas.....million cu. ft..	814	802	-	-	451	451	-	-	-	-	-	-	-
Fuels purchased:													
Distillate fuel oil.....1,000 barrels..	2,441	2,109	25	25	106	20	33	7	145	16	116	18	1
Residual fuel oil.....do....	534	490	2	-	3	-	-	-	75	13	59	5	-
Gas.....million cu. ft..	27,492	25,002	49	49	169	127	42	-	519	-	519	222	21
Gasoline.....1,000 gallons..	95,371	22,351	265	257	1,011	286	443	128	1,403	120	1,233	354	33
Other fuels.....\$1,000..	13,281	11,190	81	67	229	48	128	35	358	50	259	13	24
Undistributed.....do....	14,837	8,127	195	176	960	158	376	417	315	-	315	247	24
Electric energy purchased.....million kwh..	290	144	1	1	8	1	5	1	25	(2)	25	2	-
Electric energy generated and used.....do....	486	351	(2)	(2)	(2)	(2)	(2)	-	(2)	-	(2)	(2)	-
Wells drilled and completed except those drilled on contract for others:													
Drilled.....number..	1,957	1,734	36	36	196	65	83	42	371	37	328	51	4
Footage of wells drilled.....1,000 ft..	7,487	6,837	264	264	481	2176	186	125	1,217	178	994	157	1
Cost of drilling and equipping wells.\$1,000..	48,394	45,271	2421	2421	2,719	2985	998	725	6,309	659	5,105	1,253	1,2
Wells drilled and completed on contract of for others:													
Drilled.....number..	34,041	33,764	625	467	3,286	878	1,368	567	3,219	284	2,731	944	9
Footage of wells drilled.....1,000 ft..	154,164	153,315	1,574	1,292	7,534	2,792	2,682	1,410	10,241	1,402	8,131	2,478	2,4
Costs borne by drilling contractors in drilling and equipping wells.....\$1,000..	648,503	644,390	6,985	6,165	22,522	8,043	7,850	4,254	28,081	3,428	21,551	11,457	11,2
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total..1,000 hp..	10,187	5,253	64	56	236	73	88	44	238	20	199	97	9
Per production worker.....hp..	105	104	104	105	83	96	75	77	98	102	99	98	9
Prime movers.....1,000 hp..	10,063	5,174	63	55	232	72	86	44	233	20	194	95	9
Electric motors driven by purchased energy.....do....	124	79	1	1	4	1	2	(2)	5	(2)	5	2	-
Horsepower rating of electric motors driven by energy generated at the same establishment.....do....	257	220	(2)	(2)	1	(2)	(2)	1	3	(2)	3	1	-

See footnotes at end of table.

TABLE 3A. Detailed Statistics for Industries, by Geographic Areas: 1963-Continued

Item	1381.-Drilling oil and gas wells industry--Continued												
	East South Central					West South Central							
	Division	Kentucky	Alabama	Mississippi	Division	Arkansas	Louisiana			Oklahoma	Texas		
							State	North Louisiana	South Louisiana		State	Texas Gulf Coast A	Texas Gulf Coast B
Establishments, total.....number..	236	182	8	42	1,450	25	231	90	141	303	891	107	52
With 0 to 19 employees.....do....	200	173	5	18	947	14	106	54	52	214	613	60	34
With 20 to 99 employees.....do....	31	9	2	20	441	11	98	34	64	80	252	45	17
With 100 employees and over.....do....	5	-	1	4	62	-	27	2	25	9	26	2	1
Receipts for services and shipments....\$1,000..	49,308	8,034	8,770	32,411	660,279	7,917	253,222	32,286	220,936	84,253	314,887	43,906	17,030
Actual services and shipments in the specified State by contractors classified in all States as percent of above receipts..	113	105	107	116	97	84	93	111	91	106	99	110	124
Value added in mining services.....\$1,000..	28,506	5,649	3,494	19,291	438,916	4,622	173,491	21,749	151,742	53,974	206,829	29,475	11,444
Persons in industry, total.....number..	2,869	983	245	1,628	37,482	543	11,836	2,004	9,832	5,815	19,288	2,966	1,038
Production, development, and exploration workers.....do....	2,507	766	232	1,498	33,471	501	10,770	1,819	8,951	5,100	17,100	2,551	940
All other employees.....do....	196	70	12	114	3,297	31	987	146	841	554	1,725	366	77
Proprietors and firm members.....do....	166	147	1	16	714	11	79	39	40	161	463	49	21
Performing manual labor.....do....	132	123	1	6	477	7	40	21	19	113	317	30	15
Man-hours worked by production, development, and exploration workers, total.....1,000..	4,957	1,432	575	2,928	71,714	836	25,199	3,667	21,532	10,376	35,303	5,385	2,031
Operating and maintaining wells.....do....	350	55	59	236	4,972	140	898	210	688	943	2,991	789	220
Drilling wells and rig building.....do....	4,353	1,348	346	2,637	60,058	658	21,711	3,224	18,487	8,472	29,217	3,698	1,422
Exploration work (except drilling).....do....	5	5	-	-	625	5	37	17	20	207	376	255	-
Other work.....do....	249	24	170	55	6,059	33	2,553	216	2,337	754	2,719	643	389
Principal expenses designated below, total.....\$1,000..	36,741	5,963	6,855	23,870	456,214	5,168	168,731	21,334	147,397	62,402	219,913	33,037	11,927
Wages of production, development, and exploration workers.....do....	11,963	2,692	1,343	7,906	186,697	2,250	68,235	8,735	59,500	24,861	91,351	14,635	5,284
Salaries of all other employees.....do....	1,314	331	98	885	26,101	156	9,801	1,042	8,759	4,025	12,119	2,603	598
Supplies and purchases for resale.....do....	13,795	2,029	3,760	7,985	156,807	2,142	54,770	7,523	47,247	23,182	76,713	9,044	3,963
Fuel purchased.....do....	2,193	453	228	1,507	28,733	317	9,377	1,371	8,006	4,435	14,604	1,760	587
Electric energy purchased.....do....	168	48	63	56	1,320	31	190	126	64	287	812	99	13
Subcontract work.....do....	7,308	410	1,363	5,531	56,556	272	26,358	2,537	23,821	5,612	24,314	4,896	1,482
Purchased machinery installed.....do....	2,832	305	515	2,012	91,964	1,578	56,920	3,106	53,814	8,381	25,085	5,118	1,103
Capital expenditures, total.....do....	5,494	860	653	3,971	114,017	1,045	67,884	4,126	63,758	11,618	33,470	6,486	1,562
Development and exploration of mineral properties.....do....	2,551	129	-	2,422	7,547	8	2,127	183	1,944	2,030	3,382	1,056	178
New structures and additions.....do....	101	12	14	75	12,054	95	9,700	321	9,379	922	1,337	363	47
New machinery and equipment.....do....	1,813	537	221	1,046	71,773	615	44,838	2,762	42,076	7,010	19,310	3,963	780
Used plant and equipment.....do....	1,029	182	418	428	22,643	327	11,219	860	10,359	1,656	9,441	1,104	557
Energy used <sup>1</sup> .....million kwh. equivalent..	816	107	82	626	13,591	85	3,966	541	3,425	1,894	7,646	708	295
Fuels produced and used for fuel at same establishment:													
Crude petroleum.....1,000 barrels..	-	-	-	-	-	-	-	-	-	-	-	-	-
Natural gas.....million cu. ft..	-	-	-	-	347	-	144	97	47	8	195	1	1
Fuels purchased:													
Distillate fuel oil.....1,000 barrels..	138	8	25	105	1,330	7	993	37	956	64	266	65	32
Residual fuel oil.....do....	30	1	10	19	316	6	172	2	170	12	126	23	12
Gas.....million cu. ft..	641	8	3	630	21,921	9	3,789	771	3,018	3,087	15,036	1,044	402
Gasoline.....1,000 gallons..	1,713	251	56	1,406	14,945	183	3,241	923	2,318	1,915	9,606	1,243	531
Other fuels.....\$1,000..	488	43	42	403	8,401	22	1,471	217	1,254	1,939	4,969	454	109
Undistributed.....do....	560	276	8	271	5,037	187	1,049	474	575	1,022	2,779	299	198
Electric energy purchased.....million kwh..	11	3	6	3	85	2	14	6	8	21	48	6	1
Electric energy generated and used.....do....	1	-	(2)	1	297	(2)	141	(2)	140	2	155	14	1
Wells drilled and completed except those drilled on contract for others:													
Drilled.....number..	181	111	24	46	818	7	219	171	48	151	441	69	34
Footage of wells drilled.....1,000 ft..	3839	3192	255	392	43,772	253	1,066	616	450	589	2,064	488	223
Cost of drilling and equipping wells.\$1,000..	37,302	3684	2,639	3,979	424,770	2134	7,318	1,733	5,585	4,220	13,098	4,573	1,067
Wells drilled and completed on contract for others:													
Drilled.....number..	2,103	1,239	92	764	18,649	463	4,441	1,817	2,624	3,274	10,471	1,009	432
Footage of wells drilled on contract.....1,000 ft..	8,211	1,848	736	5,611	399,930	1,466	32,369	6,686	25,683	213,406	553,228	36,173	2,745
Costs borne by drilling contractors in drilling and equipping wells....\$1,000..	32,981	5,750	5,391	21,781	3438,598	4,781	2179,774	21,213	2151,561	252,527	203,768	22,850	9,643
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total..1,000 hp..	228	74	17	136	3,589	44	1,282	175	1,107	578	1,685	229	106
Per production worker.....hp..	91	98	73	91	107	88	119	96	125	113	99	90	113
Prime movers.....1,000 hp..	225	72	17	135	3,529	43	1,275	172	1,103	557	1,654	227	106
Electric motors driven by purchased energy.....do....	3	2	(2)	1	60	1	7	3	4	21	31	2	(2)
Horsepower rating of electric motors driven by energy generated at the same establishment.....do....	(2)	(2)	(2)	(2)	200	(2)	168	(2)	168	6	26	6	1

See footnotes at end of table.

TABLE 3A. Detailed Statistics for Industries, by Geographic Areas: 1963-Continued

Item	1381.-Drilling oil and gas wells industry-Continued											
	West South Central-Continued									Mountain		
	Texas-Continued									Division	Montana	Wyoming
	South Texas	South-west Texas	North Central Texas A	North Central Texas B	East Texas A	East Texas B	West Texas A	West Texas B	Texas Panhandle			
Establishments, total.....number..	95	44	129	77	30	45	204	52	56	252	30	77
With 0 to 19 employees.....do....	52	35	110	65	18	28	125	40	46	182	21	58
With 20 to 99 employees.....do....	40	8	18	12	9	16	68	11	8	60	8	16
With 100 employees and over.....do....	3	1	1	-	3	1	11	1	2	10	1	3
Receipts for services and shipments....\$1,000..	40,008	8,860	23,407	12,339	16,818	13,440	99,270	19,518	20,291	99,070	14,595	24,778
Actual services and shipments in the specified State by contractors classified in all States as percent of above receipts..	85	115	110	101	97	109	96	106	88	112	98	107
Value added in mining services.....\$1,000..	27,137	5,957	17,508	8,033	11,659	8,750	60,748	13,694	12,424	64,631	9,575	16,033
Persons in industry, total.....number..	2,434	610	1,752	952	964	915	5,650	887	1,120	5,270	742	1,301
Production, development, and exploration workers.....do....	2,104	557	1,504	853	867	847	5,077	812	988	4,766	666	1,171
All other employees.....do....	291	25	145	57	82	49	493	42	98	417	62	109
Proprietors and firm members.....do....	39	28	103	42	15	19	80	33	34	87	14	21
Performing manual labor.....do....	27	21	68	34	12	10	55	23	22	62	12	14
Man-hours worked by production, development, and exploration workers, total.....1,000..	4,673	1,156	2,818	1,680	1,824	1,628	10,206	1,733	2,169	10,486	1,618	2,705
Operating and maintaining wells.....do....	394	103	138	55	282	55	437	289	229	589	222	68
Drilling wells and rig building.....do....	3,829	1,003	2,536	1,464	1,493	1,443	9,015	1,412	1,902	9,043	1,301	2,443
Exploration work (except drilling).....do....	15	-	24	-	1	61	5	15	-	200	22	1
Other work.....do....	435	50	120	161	48	69	749	17	38	654	73	193
Principal expenses designated below, total.....\$1,000..	26,347	5,419	14,899	8,347	10,938	9,275	72,751	12,167	14,806	69,893	10,479	18,313
Wages of production, development, and exploration workers.....do....	11,743	2,452	6,632	3,390	4,636	4,061	28,039	4,776	5,703	29,186	4,159	7,751
Salaries of all other employees.....do....	1,748	152	668	286	690	237	4,337	297	503	3,294	609	925
Supplies and purchases for resale.....do....	8,620	1,658	5,376	3,177	4,313	3,349	26,436	4,129	6,648	25,273	3,526	6,953
Fuel purchased.....do....	2,075	480	1,262	720	842	683	4,719	691	785	3,785	663	1,246
Electric energy purchased.....do....	171	34	83	30	67	33	206	34	42	136	23	22
Subcontract work.....do....	1,990	643	878	744	390	912	9,014	2,240	1,125	8,219	1,499	1,416
Purchased machinery installed.....do....	3,431	584	1,108	459	1,160	668	9,228	1,802	424	6,917	1,236	2,003
Capital expenditures, total.....do....	3,416	496	2,808	824	1,613	955	11,081	3,072	1,157	9,891	1,927	2,895
Development and exploration of mineral properties.....do....	119	1	200	78	322	35	343	738	312	126	3	9
New structures and additions.....do....	85	23	185	42	80	33	154	237	88	252	35	15
New machinery and equipment.....do....	2,174	337	1,578	538	1,036	496	6,141	1,688	579	6,770	1,450	1,980
Used plant and equipment.....do....	1,038	135	845	166	175	391	4,443	409	178	2,743	439	891
Energy used <sup>1</sup> .....million kwh. equivalent..	1,379	163	425	174	289	334	3,268	248	365	1,292	184	341
Fuels produced and used for fuel at same establishment:												
Crude petroleum.....1,000 barrels..	-	-	-	-	-	-	-	-	-	-	-	-
Natural gas.....million cu. ft..	137	-	20	-	28	-	-	-	8	4	-	-
Fuels purchased:												
Distillate fuel oil.....1,000 barrels..	80	8	2	11	8	5	15	18	22	169	49	71
Residual fuel oil.....do....	33	11	12	3	-	(Z)	15	7	10	31	-	9
Gas.....million cu. ft..	2,793	190	507	33	299	660	8,249	249	610	1,270	12	87
Gasoline.....1,000 gallons..	2,234	295	607	584	196	302	2,800	405	409	1,864	210	814
Other fuels.....\$1,000..	355	140	438	310	301	295	1,850	389	328	1,328	230	438
Undistributed.....do....	404	120	438	173	369	156	455	69	98	643	134	165
Electric energy purchased.....million kwh..	13	2	4	2	4	2	13	1	2	8	1	1
Electric energy generated and used.....do....	1	(Z)	(Z)	3	(Z)	(Z)	128	8	(Z)	39	1	3
Wells drilled and completed except those drilled on contract for others:												
Drilled.....number..	46	29	65	54	19	21	38	52	14	94	6	6
Footage of wells drilled.....1,000 ft..	250	105	179	138	144	109	127	246	55	388	11	18
Cost of drilling and equipping wells.\$1,000..	1,005	477	774	533	1,050	531	867	1,824	397	2,750	55	67
Wells drilled and completed on contract for others:												
Drilled.....number..	1,346	585	1,327	769	300	502	2,624	594	983	2,816	371	797
Footage of wells drilled on contract.....1,000 ft..	7,719	2,594	54,828	2,801	1,813	23,427	215,562	2,674	2,892	515,045	1,985	54,036
Costs borne by drilling contractors in drilling and equipping wells.....\$1,000..	26,371	5,808	57,606	8,267	7,679	29,736	274,043	11,527	10,238	568,642	9,320	517,611
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total..1,000 hp..	232	40	152	68	130	107	442	107	72	481	63	130
Per production worker.....hp..	116	72	101	80	150	126	89	132	73	101	95	111
Prime movers.....1,000 hp..	229	39	150	67	119	106	436	106	69	478	62	130
Electric motors driven by purchased energy.....do....	3	1	2	1	11	1	6	1	3	3	1	(Z)
Horsepower rating of electric motors driven by energy generated at the same establishment.....do....	1	(Z)	1	(Z)	(Z)	4	13	(Z)	(Z)	3	(Z)	(Z)

See footnotes at end of table.

TABLE 3A. Detailed Statistics for Industries, by Geographic Areas: 1963-Continued

Item	1381.—Drilling oil and gas wells industry—Continued					1382.—Oil and gas exploration services industry								
	Mountain—Continued		Pacific		United States, total	West South Central								
	Colorado	New Mexico	Division	California		Division	Louisiana		Oklahoma	Texas				
							State	South Louisiana		State	Texas Gulf Coast A	East Texas A	West Texas A	
Establishments, total.....number..	47	84	94	87	373	212	35	31	28	144	26	37	31	
With 0 to 19 employees.....do....	41	54	49	47	305	165	22	19	21	117	21	30	24	
With 20 to 99 employees.....do....	6	25	38	33	46	32	10	9	5	17	4	3	5	
With 100 employees and over.....do....	-	5	7	7	22	15	3	3	2	10	1	4	2	
Receipts for services and shipments.....\$1,000..	9,464	40,936	54,707	49,938	119,824	79,728	21,644	21,073	9,060	48,954	13,109	18,325	7,685	
Actual services and shipments in the specified State by contractors classified in all States as percent of above receipts..	158	111	104	101	(X)	76	94	80	75	67	57	22	101	
Value added in mining services.....\$1,000..	7,021	26,313	38,782	35,031	89,988	60,606	17,085	16,522	7,407	36,056	10,001	12,707	5,863	
Persons in industry, total.....number..	497	2,278	3,061	2,888	8,886	6,475	1,622	1,578	683	4,157	1,249	1,173	695	
Production, development, and exploration workers.....do....	409	2,108	2,720	2,558	7,232	5,261	1,405	1,367	510	3,338	947	1,109	511	
All other employees.....do....	70	140	305	294	1,451	1,108	205	199	165	737	285	51	171	
Proprietors and firm members.....do....	18	30	36	36	203	106	12	12	8	82	17	13	13	
Performing manual labor.....do....	15	18	21	21	169	89	9	9	8	68	12	13	11	
Man-hours worked by production, development, and exploration workers, total.....1,000..	936	4,257	5,353	4,989	16,246	12,468	3,063	2,964	1,278	8,109	2,389	2,600	1,170	
Operating and maintaining wells.....do....	30	240	679	587	9	9	-	-	-	9	8	-	-	
Drilling wells and rig building.....do....	752	3,608	4,275	4,007	449	123	1	1	79	43	-	-	43	
Exploration work (except drilling).....do....	2	176	8	8	14,946	11,728	2,843	2,744	1,195	7,672	2,316	2,599	855	
Other work.....do....	152	233	391	387	842	608	219	219	4	385	65	1	272	
Principal expenses designated below, total.....\$1,000..	5,594	29,041	38,857	36,227	79,326	56,170	14,334	14,116	5,625	36,160	10,791	12,263	5,556	
Wages of production, development, and exploration workers.....do....	2,408	12,532	20,656	19,165	36,915	27,221	7,494	7,337	2,583	17,112	4,933	6,067	2,567	
Salaries of all other employees.....do....	437	938	2,565	2,512	10,913	8,510	1,855	1,803	1,178	5,474	2,635	391	958	
Supplies and purchases for resale.....do....	1,733	11,671	10,658	9,873	23,036	15,309	3,644	3,635	1,177	10,480	2,188	4,973	1,472	
Fuel purchased.....do....	360	1,270	1,822	1,795	3,102	2,061	553	553	311	1,195	137	364	322	
Electric energy purchased.....do....	33	54	56	40	156	109	48	48	4	57	3	18	22	
Subcontract work.....do....	623	2,576	3,100	2,842	5,204	2,960	740	740	372	1,842	895	450	215	
Purchased machinery installed.....do....	539	2,839	7,036	6,489	10,064	6,831	1,312	1,310	924	4,595	1,535	1,173	570	
Capital expenditures, total.....do....	845	3,787	6,747	6,132	11,726	8,148	1,738	1,735	1,135	5,271	1,650	1,360	779	
Development and exploration of mineral properties.....do....	1	113	32	30	-	-	-	-	-	-	-	-	-	
New structures and additions.....do....	28	156	276	202	826	560	44	44	36	480	10	5	22	
New machinery and equipment.....do....	631	2,371	5,454	5,102	10,545	7,387	1,664	1,661	1,097	4,622	1,623	1,312	722	
Used plant and equipment.....do....	185	1,147	985	798	355	201	30	30	2	169	17	43	35	
Energy used <sup>1</sup> .....million kwh. equivalent..	85	572	570	556	547	371	109	109	50	224	14	99	89	
Fuels produced and used for fuel at same establishment:														
Crude petroleum.....1,000 barrels..	-	-	-	-	-	-	-	-	-	-	-	-	-	
Natural gas.....million cu. ft..	4	-	-	-	-	-	-	-	-	-	-	-	-	
Fuels purchased:														
Distillate fuel oil.....1,000 barrels..	8	35	179	176	63	34	23	23	-	18	1	1	16	
Residual fuel oil.....do....	-	1	30	27	1	1	-	-	(2)	(2)	(2)	(2)	-	
Gas.....million cu. ft..	12	1,064	211	211	51	40	13	13	11	16	5	2	9	
Gasoline.....1,000 gallons..	286	428	796	745	8,334	5,775	1,122	1,122	677	3,976	251	2,402	755	
Other fuels.....\$1,000..	58	534	292	292	333	251	27	27	61	163	-	34	127	
Undistributed.....do....	166	146	170	169	114	91	65	65	26	-	-	-	-	
Electric energy purchased.....million kwh..	2	3	3	2	9	6	2	2	2	3	(2)	1	1	
Electric energy generated and used.....do....	-	35	14	11	(D)	-	-	-	-	-	-	-	-	
Wells drilled and completed except those drilled on contract for others:														
Drilled.....number..	36	27	-	-	27	12	-	-	3	9	-	-	-	
Footage of wells drilled.....1,000 ft..	127	131	-	-	82	45	-	-	(6)	(6)	-	-	-	
Cost of drilling and equipping wells.\$1,000..	597	1,607	-	-	280	109	-	-	(6)	(6)	-	-	-	
Wells drilled and completed on contract for others:														
Drilled.....number..	414	1,000	2,144	2,117	46	5	-	-	-	5	4	-	-	
Footage of wells drilled on contract.....1,000 ft..	22,043	5,565	58,493	28,158	126	(3)	-	-	-	(3)	(3)	-	-	
Costs borne by drilling contractors in drilling and equipping wells.....\$1,000..	25,516	28,571	536,581	232,761	1,239	(3)	-	-	-	(3)	(3)	-	-	
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total..1,000 hp..	45	191	321	283	877	662	84	81	127	449	142	108	85	
Per production worker.....hp..	110	91	118	111	121	126	60	59	249	135	150	97	166	
Prime movers.....1,000 hp..	44	189	319	281	874	659	83	80	126	448	142	108	85	
Electric motors driven by purchased energy.....do....	1	2	2	2	3	3	1	1	1	1	(2)	(2)	(2)	
Horsepower rating of electric motors driven by energy generated at the same establishment.....do....	(2)	1	11	10	31	(2)	-	-	-	(2)	(2)	-	-	

See footnotes at end of table.

TABLE 3A. Detailed Statistics for Industries, by Geographic Areas: 1963-Continued

Item	1382.-Oil and gas field exploration services			1389.-Oil and gas field services, n.e.c., industry									
	Mountain	Pacific		United States			North Central		South Atlantic and East South Central		West South Central		
		Division	California	Total	Survey, log, cement, services sub-industry	Miscellaneous oil and gas field services sub-industry	Division	Kansas	Division	Mississippi	Division	Survey, log, cement, services sub-industry	Miscellaneous oil and gas field services sub-industry
Establishments, total.....number..	81	20	15	3,003	268	2,735	545	278	133	46	1,741	151	1,590
With 0 to 19 employees.....do....	73	14	12	2,569	239	2,330	506	257	121	40	1,433	130	1,303
With 20 to 99 employees.....do....	7	2	1	395	23	372	37	20	12	6	278	15	263
With 100 employees and over.....do....	1	4	2	39	6	33	2	1	-	-	30	6	24
Receipts for services and shipments....\$1,000..	9,647	22,172	13,807	718,754	245,335	473,419	41,358	20,806	11,658	5,198	589,325	230,913	358,412
Actual services and shipments in the specified State by contractors classified in all States as percent of above receipts..	190	103	69	(X)	(X)	(X)	(NA)	178	(NA)	252	81	69	89
Value added in mining services.....\$1,000..	6,347	18,061	11,473	498,029	173,821	324,208	32,318	16,077	9,333	4,279	396,454	162,505	233,949
Persons in industry, total.....number..	682	991	696	50,280	11,252	39,028	4,246	2,200	1,253	533	38,344	10,418	27,926
Production, development, and exploration workers.....do....	506	843	572	39,028	8,251	30,777	3,283	1,753	1,033	433	29,557	7,678	21,879
All other employees.....do....	108	143	119	9,246	2,887	6,359	563	231	115	64	7,664	2,668	4,996
Proprietors and firm members.....do....	68	5	5	2,006	114	1,892	400	216	105	36	1,123	72	1,051
Performing manual labor.....do....	59	3	3	1,634	99	1,535	344	185	82	25	896	61	835
Man-hours worked by production, development, and exploration workers, total.....l,000..	1,119	1,391	877	84,076	20,584	63,492	6,400	3,417	1,992	777	65,260	19,247	46,013
Operating and maintaining wells.....do....	-	-	-	10,288	360	9,928	1,492	803	227	77	6,684	261	6,423
Drilling wells and rig building.....do....	34	243	-	2,072	378	1,694	138	42	46	37	1,527	371	1,156
Exploration work (except drilling).....do....	1,026	1,032	761	2,057	194	1,863	117	66	133	9	1,552	97	1,455
Other work.....do....	59	116	116	69,659	19,652	50,007	4,653	2,506	1,586	654	55,497	18,518	36,979
Principal expenses designated below, total.....\$1,000..	6,388	9,927	5,638	492,618	155,184	337,434	25,497	12,866	6,715	2,746	410,590	146,812	263,778
Wages of production, development, and exploration workers.....do....	2,466	4,587	2,577	199,414	55,201	144,213	13,185	6,804	3,776	1,529	155,131	51,674	103,457
Salaries of all other employees.....do....	353	1,490	1,257	66,335	26,604	39,731	2,763	1,121	442	215	57,453	25,406	32,047
Supplies and purchases for resale.....do....	2,122	3,327	1,626	184,909	62,918	121,991	6,650	3,492	1,649	614	165,431	59,923	105,508
Fuel purchased.....do....	569	142	105	26,376	8,399	17,977	1,777	948	459	205	21,416	7,941	13,475
Electric energy purchased.....do....	17	17	15	1,888	688	1,200	69	35	19	5	1,518	672	846
Subcontract work.....do....	861	364	58	13,696	1,374	12,322	1,053	466	370	178	9,641	1,196	8,445
Purchased machinery installed.....do....	601	2,373	1,960	62,010	22,134	39,876	3,254	1,691	1,782	488	50,605	20,784	29,821
Capital expenditures, total.....do....	870	2,112	1,430	68,154	23,999	44,155	3,763	1,903	1,954	571	55,740	22,108	33,632
Development and exploration of mineral properties.....do....	-	-	-	348	80	268	23	1	1	1	61	-	61
New structures and additions.....do....	42	80	75	7,461	4,124	3,337	423	241	80	26	6,510	3,982	2,528
New machinery and equipment.....do....	754	1,959	1,355	53,827	18,695	35,132	2,604	1,197	1,308	497	44,720	17,564	27,158
Used plant and equipment.....do....	74	73	-	6,518	1,100	5,418	713	464	565	47	4,449	562	3,887
Energy used.....million kwh. equivalent..	93	43	31	5,821	1,521	4,300	334	166	102	45	4,405	2,010	3,023
Fuels produced and used for fuel at same establishment:	-	-	-	-	-	-	-	-	-	-	-	-	-
Crude petroleum.....l,000 barrels..	-	-	-	12	-	12	-	-	-	-	12	-	12
Natural gas.....million cu. ft..	-	-	-	-	-	-	-	-	-	-	-	-	-
Fuels purchased:	-	-	-	-	-	-	-	-	-	-	-	-	-
Distillate fuel oil.....l,000 barrels..	7	21	14	269	5	268	10	4	-	-	227	4	223
Residual fuel oil.....do....	-	-	-	43	-	43	-	(2)	(2)	-	41	-	41
Gas.....million cu. ft..	8	(2)	(2)	2,439	707	1,732	20	20	42	(2)	2,339	657	1,682
Gasoline.....l,000 gallons..	1,483	170	160	64,686	28,365	36,321	3,666	2,271	1,095	510	54,970	27,229	27,741
Other fuels.....\$1,000..	82	-	-	1,758	196	1,562	90	25	22	20	1,391	190	1,201
Undistributed.....do....	18	-	-	6,596	691	5,905	637	260	176	90	3,169	366	2,803
Electric energy purchased.....million kwh..	1	1	1	137	48	89	1	1	1	(2)	108	47	61
Electric energy generated and used.....do....	-	(D)	(D)	(D)	(Z)	(D)	2	-	-	-	(D)	(Z)	(D)
Wells drilled and completed except those drilled on contract for others:	-	-	-	-	-	-	-	-	-	-	-	-	-
Drilled.....number..	1	-	-	196	4	192	63	29	8	-	95	4	91
Footage of wells drilled.....l,000 ft..	(6)	-	-	568	(D)	(D)	144	76	14	-	4,314	(D)	(D)
Cost of drilling and equipping wells.....\$1,000..	(6)	-	-	2,843	(D)	(D)	752	367	86	-	41,481	(D)	(D)
Wells drilled and completed on contract for others:	-	-	-	-	-	-	-	-	-	-	-	-	-
Drilled.....number..	4	12	-	231	56	175	73	53	2	-	99	56	43
Footage of wells drilled on contract.....l,000 ft..	(3)	(3)	-	723	452	271	93	69	(D)	-	539	(D)	(D)
Costs borne by drilling contractors in drilling and equipping wells.....\$1,000..	(3)	(3)	-	2,874	1,989	885	238	163	(D)	-	2,252	(D)	(D)
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total..l,000 hp.	66	71	49	4,057	1,138	2,919	283	157	79	38	3,184	1,046	2,138
Per production worker.....hp.	130	84	86	104	138	95	86	90	76	88	108	136	98
Prime movers.....l,000 hp.	66	71	49	4,015	1,126	2,889	279	156	78	38	3,149	1,035	2,114
Electric motors driven by purchased energy.....do....	(Z)	(Z)	(Z)	42	12	30	4	1	1	(Z)	35	11	24
Horsepower rating of electric motors driven by energy generated at the same establishment.....do....	1	30	22	6	-	6	1	(Z)	-	-	5	-	5

See footnotes at end of table.

TABLE 3A. Detailed Statistics for Industries, by Geographic Areas: 1963-Continued

1389.-Oil and gas field services, n.e.c., industry-Continued													
Item	West South Central-Continued												
	Louisiana					Oklahoma	Texas						
	Total	Survey, log, cement, services sub-industry	Miscellaneous oil and gas field services sub-industry	North Louisiana	South Louisiana		Total	Survey, log, cement, services sub-industry	Miscellaneous oil and gas field services sub-industry	Texas Gulf Coast A	South Texas	North Central Texas A	North Central Texas B
Establishments, total.....number..	271	31	240	72	199	351	1,082	92	990	174	107	115	81
With 0 to 19 employees.....do....	198	23	175	63	135	305	897	80	817	144	97	102	76
With 20 to 99 employees.....do....	61	5	56	9	52	45	168	9	159	26	9	12	5
With 100 employees and over.....do....	12	3	9	-	12	1	17	3	14	4	1	1	-
Receipts for services and shipments....\$1,000..	166,695	83,354	83,341	6,411	160,284	33,560	386,193	145,002	241,191	37,723	11,623	7,986	5,701
Actual services and shipments in the specified State by contractors classified in all States as percent of above receipts..	92	76	109	275	84	172	68	53	77	119	224	200	176
Value added in mining services.....\$1,000..	104,582	59,806	44,776	4,808	99,774	26,665	262,837	100,733	162,104	28,642	8,945	5,964	4,861
Persons in industry, total.....number..	10,631	3,940	6,691	632	9,999	4,563	22,764	5,545	17,219	2,771	1,034	1,060	607
Production, development, and exploration workers.....do....	8,368	2,860	5,508	518	7,850	3,085	17,778	4,687	13,091	1,950	772	793	463
All other employees.....do....	2,138	1,073	1,065	68	2,070	1,238	4,257	804	3,453	754	196	152	59
Proprietors and firm members.....do....	125	7	118	46	79	240	729	54	675	67	66	115	85
Performing manual labor.....do....	109	6	103	39	70	189	572	45	527	53	56	92	57
Man-hours worked by production, development, and exploration workers, total.....1,000..	18,155	6,343	11,812	1,073	17,082	5,367	41,127	12,559	28,568	3,900	1,712	1,538	1,104
Operating and maintaining wells.....do....	1,320	40	1,280	334	986	1,114	4,087	203	3,884	359	79	465	380
Drilling wells and rig building.....do....	819	327	492	15	804	122	565	44	521	40	31	17	15
Exploration work (except drilling).....do....	920	35	885	36	884	218	411	37	374	36	24	40	4
Other work.....do....	15,096	5,941	9,155	688	14,408	3,913	36,064	12,275	23,789	3,465	1,578	1,016	705
Principal expenses designated below, total.....\$1,000..	130,526	53,694	76,832	4,077	126,449	26,853	251,502	85,620	165,882	23,676	6,686	5,373	3,319
Wages of production, development, and exploration workers.....do....	45,868	17,083	28,785	2,072	43,796	11,670	96,543	33,817	62,726	9,040	3,193	2,739	1,882
Salaries of all other employees.....do....	20,165	12,463	7,702	217	19,948	7,985	29,163	6,879	22,284	5,004	604	464	266
Supplies and purchases for resale.....do....	54,317	19,702	34,615	1,095	53,222	4,822	105,982	39,698	66,284	7,728	1,841	1,317	790
Fuel purchased.....do....	5,881	3,084	2,797	234	5,647	1,477	13,913	4,725	9,188	972	503	322	266
Electric energy purchased.....do....	491	377	114	13	478	42	979	294	685	76	6	6	4
Subcontract work.....do....	3,804	985	2,819	446	3,358	857	4,922	207	4,715	856	539	525	111
Purchased machinery installed.....do....	14,080	7,940	6,140	1,021	13,059	2,570	33,730	12,798	20,932	2,765	1,120	255	311
Capital expenditures, total.....do....	16,460	8,540	7,920	1,206	15,254	2,873	36,170	13,453	22,717	3,316	1,331	403	640
Development and exploration of mineral properties.....do....	50	-	50	50	-	4	7	-	7	2	-	-	-
New structures and additions.....do....	4,629	3,721	908	56	4,573	180	1,688	254	1,434	149	30	81	172
New machinery and equipment.....do....	9,779	4,296	5,483	776	9,003	2,196	32,541	13,161	19,380	3,071	980	281	420
Used plant and equipment.....do....	2,002	523	1,479	324	1,678	493	1,934	38	1,896	94	321	41	48
Energy used <sup>1</sup> .....million kwh. equivalent..	1,259	797	797	57	1,202	303	2,799	904	1,895	203	104	63	103
Fuels produced and used for fuel at same establishment:													
Crude petroleum.....1,000 barrels..	-	-	-	-	-	-	-	-	-	-	-	-	-
Natural gas.....million cu. ft..	-	-	-	-	-	4	8	-	8	8	-	-	-
Fuels purchased:													
Distillate fuel oil.....1,000 barrels...	159	4	155	2	157	14	54	-	54	5	(2)	(2)	-
Residual fuel oil.....do....	4	-	4	-	4	4	31	-	31	1	1	-	-
Gas.....million cu. ft....	729	6	723	26	703	45	1,513	650	863	37	25	(2)	194
Gasoline.....1,000 gallons..	13,296	9,646	3,650	200	13,096	2,597	39,870	17,273	21,597	1,874	852	538	509
Other fuels.....\$1,000..	482	184	298	28	454	223	656	6	650	65	10	45	12
Undistributed.....do....	519	103	416	131	388	441	2,181	215	1,966	376	253	130	88
Electric energy purchased.....million kwh..	30	25	5	(2)	30	2	77	22	55	4	(2)	(2)	(2)
Electric energy generated and used.....do....	(D)	-	(D)	-	(D)	(2)	1	(2)	1	-	(2)	-	(2)
Wells drilled and completed except those drilled on contract for others:													
Drilled.....number..	24	-	24	24	-	22	47	4	43	3	3	3	15
Footage of wells drilled.....1,000 ft..	99	-	99	99	-	649	6,211	(D)	(D)	(D)	(D)	(D)	659
Cost of drilling and equipping wells.\$1,000..	304	-	304	304	-	6,170	61,116	(D)	(D)	(D)	(D)	(D)	6,145
Wells drilled and completed on contract for others:													
Drilled.....number..	31	31	-	-	31	5	63	25	38	-	-	6	-
Footage of wells drilled on contract.....1,000 ft..	(2)	(2)	-	-	(2)	(2)	(2)	(2)	(2)	-	-	(2)	-
Costs borne by drilling contractors in drilling and equipping wells.....\$1,000..	(2)	(2)	-	-	(2)	(2)	(2)	(2)	(2)	-	-	(2)	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total..1,000 hp..	804	391	413	45	759	277	2,079	639	1,440	181	71	71	38
Per production worker.....hp..	96	137	75	87	97	90	117	136	110	93	92	90	82
Prime movers.....1,000 hp..	798	387	411	45	753	275	2,052	632	1,420	180	71	70	38
Electric motors driven by purchased energy.....do....	6	4	2	(2)	6	2	27	7	20	1	(2)	1	(2)
Horsepower rating of electric motors driven by energy generated at the same establishment.....do....	3	-	3	3	(2)	(2)	2	-	2	-	-	1	(2)

See footnotes at end of table.

TABLE 3A. Detailed Statistics for Industries, by Geographic Areas: 1963—Continued

Item	1389.—Oil and gas field services, n.e.c., industry—Continued											
	West South Central—Continued				Mountain				Pacific			
	Texas—Continued				Division	Wyoming	New Mexico		Division	Survey, log, cement, services sub-industry	Miscellaneous oil and gas field services sub-industry	California
	East Texas A	East Texas B	West Texas A	Texas Panhandle			State	East New Mexico				
Establishments, total.....number..	20	102	291	85	325	85	134	106	187	34	153	181
With 0 to 19 employees.....do....	17	85	215	70	285	76	114	87	154	30	124	149
With 20 to 99 employees.....do....	3	15	68	15	38	9	18	17	28	4	24	27
With 100 employees and over.....do....	-	2	8	-	2	-	2	2	5	-	5	5
Receipts for services and shipments...\$1,000..	5,046	14,695	282,574	11,497	36,376	9,888	16,314	14,113	36,914	5,490	31,424	35,517
Actual services and shipments in the specified State by contractors classified in all States as percent of above receipts..	91	132	34	156	201	187	213	182	142	306	113	137
Value added in mining services.....\$1,000..	4,346	11,359	183,352	8,105	28,944	8,001	13,012	11,371	28,611	4,367	24,244	27,241
Persons in industry, total.....number..	456	1,342	13,348	997	3,327	741	1,650	1,474	2,737	313	2,424	2,673
Production, development, and exploration workers.....do....	364	1,124	10,530	833	2,733	570	1,414	1,281	2,141	205	1,936	2,082
All other employees.....do....	81	156	2,622	104	390	117	148	117	483	92	391	478
Proprietors and firm members.....do....	11	62	196	60	204	54	88	76	113	16	97	113
Performing manual labor.....do....	10	48	150	45	164	34	78	66	90	15	75	90
Man-hours worked by production, development, and exploration workers, total..1,000..	737	2,327	25,916	2,003	5,707	1,241	2,769	2,375	4,135	472	3,663	4,003
Operating and maintaining wells.....do....	10	284	1,887	382	1,094	170	820	778	746	40	706	718
Drilling wells and rig building.....do....	6	68	202	156	177	104	62	61	55	7	48	55
Exploration work (except drilling).....do....	4	94	183	6	156	80	43	36	92	62	30	92
Other work.....do....	717	1,881	23,644	1,459	4,280	887	1,844	1,500	3,242	363	2,879	3,138
Principal expenses designated below, total.....\$1,000..	3,473	9,087	186,212	7,465	21,804	5,744	9,830	8,467	26,001	3,549	22,452	25,261
Wages of production, development, and exploration workers.....do....	2,324	5,029	64,726	4,182	12,731	3,142	5,682	5,036	13,531	1,493	12,038	13,031
Salaries of all other employees.....do....	432	574	21,098	390	1,789	505	881	708	3,709	577	3,132	3,605
Supplies and purchases for resale.....do....	504	2,268	88,217	2,008	4,664	1,428	2,192	1,793	5,926	1,198	4,728	5,890
Fuel purchased.....do....	97	641	10,225	514	1,581	436	746	654	1,024	128	896	983
Electric energy purchased.....do....	31	176	637	25	209	24	22	19	71	7	64	70
Subcontract work.....do....	85	399	1,309	346	830	209	307	257	1,740	146	1,594	1,682
Purchased machinery installed.....do....	235	1,076	25,581	1,844	3,836	702	1,893	1,633	2,365	263	2,102	2,274
Capital expenditures, total.....do....	252	1,224	26,747	1,345	3,688	912	1,858	1,614	2,823	619	2,204	2,623
Development and exploration of mineral properties.....do....	-	-	4	1	3	-	3	2	261	76	185	133
New structures and additions.....do....	25	196	766	223	236	77	123	88	203	115	88	202
New machinery and equipment.....do....	194	938	24,966	913	2,856	654	1,389	1,219	2,172	394	1,778	2,146
Used plant and equipment.....do....	33	90	1,011	208	593	181	343	305	187	34	153	142
Energy used <sup>1</sup> .....million kwh. equivalent..	33	220	1,893	99	332	86	147	141	202	84	178	179
Fuels produced and used for fuel at same establishment:												
Crude petroleum.....1,000 barrels..	-	-	-	-	-	-	-	-	-	-	-	-
Natural gas.....million cu. ft..	-	-	-	-	-	-	-	-	-	-	-	-
Fuels purchased:												
Distillate fuel oil.....1,000 barrels..	(2)	5	33	-	-	-	11	11	6	5	3	3
Residual fuel oil.....do....	-	-	24	1	30	8	-	-	1	1	(2)	(2)
Gas.....million cu. ft..	(2)	275	940	30	26	17	1	1	9	1	8	9
Gasoline.....1,000 gallons..	356	1,088	31,286	1,218	2,714	792	1,076	969	2,095	1,763	1,954	1,635
Other fuels.....\$1,000..	15	48	401	23	153	12	116	114	92	-	92	92
Undistributed.....do....	66	241	781	149	475	139	247	238	349	42	307	349
Electric energy purchased.....million kwh..	(2)	15	78	2	22	1	1	1	4	(2)	3	4
Electric energy generated and used.....do....	-	-	1	-	-	-	-	-	(2)	-	(2)	(2)
Wells drilled and completed except those drilled on contract for others:												
Drilled.....number..	-	6	5	-	12	4	-	-	17	-	17	16
Footage of wells drilled.....1,000 ft..	-	632	15	-	669	625	-	-	20	-	20	(D)
Cost of drilling and equipping wells.....\$1,000..	-	690	58	-	6224	6139	-	-	287	-	287	(D)
Wells drilled and completed on contract for others:												
Drilled.....number..	-	13	44	-	33	27	4	4	3	-	3	3
Footage of wells drilled on contract.....1,000 ft..	-	(2)	(2)	-	(5)	(5)	6	6	(5)	-	(5)	(2)
Cost borne by drilling contractors in drilling and equipping wells.....\$1,000..	-	(2)	(2)	-	(5)	(5)	20	20	(5)	-	(5)	(2)
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total..1,000 hp..	19	164	1,350	81	244	61	121	107	240	36	204	231
Per production worker.....hp..	52	146	128	97	89	107	86	84	112	176	105	111
Prime movers.....1,000 hp..	19	158	1,333	81	243	61	120	107	239	36	203	230
Electric motors driven by purchased energy.....do....	(2)	6	17	(2)	1	(2)	1	(2)	1	(2)	1	1
Horsepower rating of electric motors driven by energy generated at the same establishment.....do....	-	1	(2)	(2)	(2)	-	(2)	(2)	(2)	-	(2)	(2)

Footnotes on next page.



TABLE 3A. Detailed Statistics for Industries, by Geographic Areas: 1963--Continued

Footnotes for Table 3A--13D

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

(Z) Less than one-half of the unit of measure specified.

n.e.c. Not elsewhere classified.

<sup>1</sup>Excludes fuels furnished without charge by oil and gas companies for whom work was performed.<sup>2</sup>Figures for industry 1389, Oil and Gas Field Services, N.E.C., are included with those for industry 1381, Drilling Oil and Gas Wells.<sup>3</sup>Figures for industry 1382, Oil and Gas Exploration Services, are included with those for industry 1381, Drilling Oil and Gas Wells.<sup>4</sup>Figures for 2 wells in Arkansas industry 1389, Oil and Gas Field Services, N.E.C., are included with those for industry 1381, Drilling Oil and Gas Wells.<sup>5</sup>Figures for industry 1382, Oil and Gas Exploration Services, and industry 1389, Oil and Gas Field Services, N.E.C., are included with those for industry 1381, Drilling Oil and Gas Wells.<sup>6</sup>Figures for industry 1382, Oil and Gas Exploration Services, are included with those for industry 1389, Oil and Gas Field Services, N.E.C.

TABLE 3B. Detailed Statistics for Industries, by Principal Types of Services: 1963

Item	138.- Oil and gas field services industries, total	1381.-Drilling oil and gas wells industry							1382.-Oil and gas explo- ration services industry		
		Total	Drilling oil, gas, dry, and service wells			Drilling in, spudding in, tailing in, and reworking wells			Total	Geo- physical explora- tion	Other explora- tion
			Total	With well opera- tions	Without well opera- tions	Total	With well opera- tions	Without well opera- tions			
Establishments, total.....number..	6,212	2,836	2,218	337	1,881	618	43	575	373	299	74
With 0 to 19 employees.....do....	4,964	2,090	1,632	206	1,426	458	34	424	305	235	70
With 20 to 99 employees.....do....	1,101	660	510	121	389	150	9	141	46	43	3
With 100 employees and over.....do....	147	86	76	10	66	10	-	10	22	21	1
Receipts for services and shipments, total.....\$1,000..	1,817,894	979,316	853,908	173,965	679,943	125,408	11,158	114,250	119,824	109,039	10,785
Geophysical exploration.....do....	98,490	145	140	-	140	5	-	5	98,216	98,747	8,842
Other exploration.....do....	10,947	164	(D)	(D)	(D)	(D)	-	(D)	9,373		
Well surveying and well logging.....do....	119,255	233	(D)	(D)	(D)	(D)	-	(D)	1,530	1,518	12
Drilling oil, gas, dry, and service wells.....do....	795,232	792,846	788,502	125,766	662,736	4,344	94	4,250	1,616	85	1,531
Drilling in, spudding in, and tailing in.....do....	26,502	25,057	1,761	510	1,251	23,296	4,062	19,234	-	-	-
Reworking wells.....do....	99,205	88,204	7,443	1,368	6,075	80,761	3,393	77,368	2	2	-
Building (erecting), repairing, and dismantling rigs and derricks.....do....	6,504	192	192	(D)	(D)	-	-	-	-	-	-
Excavating slush pits and cellars.....do....	7,155	377	92	18	74	285	3	282	15	-	15
Running, cutting, and pulling casing, tubes, and rods.....do....	57,486	5,634	1,827	207	1,620	3,807	162	3,645	2	2	-
Cementing wells.....do....	86,481	203	74	3	71	129	50	79	-	-	-
Perforating well casing.....do....	30,497	211	84	-	84	127	60	67	432	432	-
Acidizing and other chemical treatment of wells.....do....	75,855	99	72	-	72	27	-	27	-	-	-
Cleaning out, bailing out, and swabbing wells.....do....	35,889	7,276	768	146	622	6,508	364	6,144	36	2	34
Installing production equipment, such as wellhead fittings, pumps, and engines.....do....	23,761	2,259	2,089	1,401	688	170	(D)	(D)	156	-	156
Erecting, cleaning, repairing, and dismantling lease tanks.....do....	5,402	84	39	(D)	(D)	45	-	45	12	-	12
Pumping wells but not operating leases.....do....	4,773	177	157	55	102	20	1	19	-	-	-
Other oil and gas field services.....do....	191,892	1,795	685	463	222	1,110	60	1,050	233	(D)	(D)
Oil and gas field machine-shop work.....do....	1,534	313	282	5	277	31	-	31	-	-	-
Hauling oil and gas field supplies and equipment.....do....	6,125	3,183	2,783	80	2,703	400	(D)	(D)	6	-	6
Crude petroleum shipped.....do....	42,066	37,826	35,941	35,941	-	1,885	1,885	-	62	(D)	(D)
Natural gas shipped.....do....	8,511	7,941	7,087	7,087	-	854	854	-	11	-	11
Products purchased and resold without further processing.....do....	81,585	4,770	3,558	831	2,727	1,203	146	1,057	8,120	8,119	1
Miscellaneous receipts and services.....do....	2,747	327	(D)	-	(D)	(D)	-	(D)	2	-	2
Value added in mining services.....do....	1,241,354	653,337	551,594	115,362	436,232	101,743	8,854	92,889	89,988	81,853	8,135
Persons in industry, total.....number..	116,117	56,951	46,041	8,759	37,282	10,910	777	10,133	8,886	8,396	490
Production, development, and exploration workers, average for year.....do....	96,593	50,333	40,803	7,505	33,298	9,530	631	8,899	7,232	6,867	365
March.....do....	95,200	49,529	40,108	7,456	32,652	9,421	640	8,781	6,708	6,356	352
May.....do....	96,807	50,712	41,045	7,445	33,600	9,667	634	9,033	7,319	6,936	383
August.....do....	97,192	50,041	40,368	7,306	33,062	9,673	646	9,027	7,577	7,225	352
November.....do....	97,168	51,048	41,688	7,812	33,876	9,360	604	8,756	7,322	6,951	371
All other employees.....do....	15,780	5,083	4,164	1,029	3,135	919	91	828	1,451	1,396	55
Proprietors and firm members.....do....	3,744	1,535	1,074	225	849	461	55	406	203	133	70
Performing manual labor.....do....	2,922	1,119	822	167	653	297	30	267	169	103	66
Man-hours worked by production, development, and exploration workers, total.....1,000..	206,588	106,266	87,680	16,286	71,394	18,586	1,308	17,278	16,246	15,364	882
Operating and maintaining wells.....do....	17,705	7,408	2,272	1,546	726	5,136	428	4,708	9	7	2
Drilling wells and rig building.....do....	92,149	89,628	81,403	13,789	67,614	8,225	591	7,634	449	157	292
Exploration work (except drilling).....do....	18,064	1,061	645	374	271	416	45	371	14,946	14,487	459
Other work.....do....	78,670	8,169	3,360	577	2,783	4,809	244	4,565	842	713	129
Principal expenses designated below, total.....\$1,000..	1,248,418	676,474	599,531	118,040	481,491	76,943	6,234	70,709	79,326	73,716	5,610
Wages of production, development, and exploration workers.....do....	517,393	281,064	235,467	40,053	195,414	45,597	3,164	42,433	36,915	34,514	2,401
Salaries of all other employees.....do....	114,334	37,086	31,577	6,705	24,872	5,509	490	5,019	10,913	10,570	343
Supplies.....do....	385,913	229,469	212,831	41,859	170,972	16,638	1,610	15,028	15,482	13,865	1,617
Products purchased for resale.....do....	54,381	2,880	2,009	533	1,476	871	139	732	7,554	7,554	-
Fuel purchased.....do....	71,189	41,711	36,854	6,997	29,857	4,857	310	4,547	3,102	2,746	356
Electric energy purchased.....do....	4,255	2,211	2,001	493	1,508	210	51	159	156	138	18
Subcontract work.....do....	100,953	82,053	78,792	21,400	57,392	3,261	470	2,791	5,204	4,329	875
Purchased machinery installed.....do....	187,755	115,681	101,484	15,988	85,496	14,197	542	13,655	10,064	9,239	825
Capital expenditures, total.....do....	227,906	148,026	131,657	28,667	102,990	16,369	818	15,551	11,726	10,685	1,041
Development and exploration of mineral properties.....do....	12,699	12,351	12,102	11,632	470	249	162	87	-	-	-
New structures and additions.....do....	21,829	13,542	12,555	2,169	10,386	987	52	935	826	664	162
New machinery and equipment.....do....	157,005	92,633	79,898	8,880	71,018	12,735	476	12,259	10,545	9,772	773
Used plant and equipment.....do....	36,373	29,500	27,102	5,986	21,116	2,398	128	2,270	355	249	106

See footnotes at end of table.

TABLE 3B. Detailed Statistics for Industries, by Principal Types of Services: 1963-Continued

Item	1389.-Oil and gas field services, n.e.c., industry											
	Total	Well surveying, well logging, and cementing wells	Building (erecting), repairing, and dismantling rigs and derricks	Excavating slush pits and cellars	Running, cutting, and pulling casing, tubes, and rods	Perforating well casing	Acidizing and other chemical treatment of wells	Cleaning out, bailing out, and swabbing wells	Installing production equipment	Erecting, cleaning, repairing, and dismantling lease tanks	Pumping wells but not operating leases	Other oil and gas field services, n.e.c.
Establishments, total.....number..	3,003	268	56	56	506	61	70	273	140	55	135	1,383
With 0 to 19 employees.....do....	2,569	239	45	47	419	52	60	232	106	50	130	1,189
With 20 to 99 employees.....do....	395	23	10	9	84	8	7	41	32	5	4	172
With 100 employees and over.....do....	39	6	1	-	3	1	3	-	2	-	1	22
Receipts for services and shipments, total....\$1,000..	718,754	245,335	5,257	7,771	65,323	29,057	99,008	26,440	19,600	4,691	5,390	210,882
Geophysical exploration.....do....	129	31	-	50	-	-	-	-	12	-	-	36
Other exploration.....do....	1,410	(D)	-	-	-	-	-	-	-	-	(D)	1,383
Well surveying and well logging.....do....	117,492	100,825	-	-	(D)	8,919	-	66	67	-	-	(D)
Drilling oil, gas, dry, and service wells.....do....	770	41	-	-	(D)	-	-	183	-	57	9	462
Drilling in, spudding in, and tailing in.....do....	1,445	-	86	89	1,088	-	-	127	-	-	-	33
Reworking wells.....do....	10,999	-	106	8,415	-	-	243	1,513	200	-	59	463
Building (erecting), repairing, and dismantling rigs and derricks.....do....	6,312	-	4,603	86	-	-	-	54	27	-	-	1,542
Excavating slush pits and cellars.....do....	6,763	-	(D)	5,453	(D)	-	10	32	110	-	-	1,148
Running, cutting, and pulling casing, tubes, and rods.....do....	51,850	(D)	(D)	-	47,027	(D)	16	906	180	(D)	-	3,559
Cementing wells.....do....	86,288	67,530	-	-	153	-	18,571	(D)	-	-	-	(D)
Perforating well casing.....do....	29,854	10,854	-	-	24	15,238	644	87	1	-	(D)	3,000
Acidizing and other chemical treatment of wells.....do....	75,756	5,673	-	230	76	71	67,818	77	-	-	-	1,811
Cleaning out, bailing out, and swabbing wells.....do....	28,577	-	-	168	4,280	-	25	21,851	101	(D)	-	2,105
Installing production equipment, such as wellhead fittings, pumps, and engines.....do....	21,346	40	(D)	497	860	67	-	122	16,412	219	-	3,066
Erecting, cleaning, repairing, and dismantling lease tanks.....do....	5,306	-	(D)	82	237	-	-	50	86	3,505	117	1,214
Pumping wells but not operating leases.....do....	4,596	-	-	-	-	-	-	(D)	-	-	4,150	(D)
Other oil and gas field services.....do....	189,856	10,451	23	471	1,000	3,383	650	250	1,051	450	460	171,667
Oil and gas field machine-shop work.....do....	1,221	-	235	4	100	-	1	-	(D)	50	-	(D)
Hauling oil and gas field supplies and equipment.....do....	2,936	269	70	360	460	-	82	132	278	219	-	1,066
Crude petroleum shipped.....do....	4,178	46	-	-	389	-	-	212	61	6	489	2,976
Natural gas shipped.....do....	559	-	1	-	4	-	-	20	-	-	80	453
Products purchased and resold without further processing.....do....	68,695	49,521	70	118	836	1,323	9,852	435	360	156	-	6,024
Miscellaneous receipts and services.....do....	2,416	(D)	-	57	293	-	1,096	316	584	-	-	(D)
Value added in mining services.....do....	498,029	173,821	4,147	5,730	52,557	24,206	48,061	22,101	16,819	3,843	4,036	142,708
Persons in industry, total.....number..	50,280	11,252	819	676	6,285	1,596	3,780	3,002	2,388	543	598	19,341
Production, development, and exploration workers, average for year.....do....	39,028	8,251	648	517	5,298	866	2,772	2,401	1,889	462	478	15,446
March.....do....	38,963	8,199	213	508	5,276	863	2,404	2,419	1,989	463	480	15,649
May.....do....	38,776	8,200	646	505	5,243	863	2,882	2,412	1,790	483	496	15,256
August.....do....	39,574	8,404	615	518	5,442	876	2,894	2,449	1,902	463	480	15,531
November.....do....	38,798	8,201	617	537	5,230	863	2,906	2,323	1,874	438	460	15,349
All other employees.....do....	9,246	2,887	151	113	602	716	989	385	400	35	87	2,881
Proprietors and firm members.....do....	2,006	114	20	46	385	14	19	216	99	46	33	1,014
Performing manual labor.....do....	1,634	99	18	36	385	13	19	173	74	37	33	747
Man-hours worked by production, development, and exploration workers, total.....1,000..	84,076	20,584	933	1,100	10,657	2,474	7,671	4,639	3,424	680	967	30,947
Operating and maintaining wells.....do....	10,288	360	266	37	2,735	31	64	1,206	459	145	950	4,035
Drilling wells and rig building.....do....	2,072	378	437	30	321	128	-	170	17	4	-	587
Exploration work (except drilling).....do....	2,057	194	5	86	26	166	-	18	-	73	-	1,489
Other work.....do....	69,659	19,652	225	947	7,575	2,149	7,607	3,245	2,948	458	17	24,836
Principal expenses designated below, total....\$1,000..	492,618	155,184	4,383	4,602	38,879	17,063	76,891	15,803	13,286	2,890	3,645	159,992
Wages of production, development, and exploration workers.....do....	199,414	55,201	2,385	2,281	22,323	5,590	18,876	10,014	7,934	1,718	1,696	71,396
Salaries of all other employees.....do....	66,335	26,604	802	484	3,407	5,319	8,114	1,356	2,163	157	575	17,354
Supplies.....do....	140,962	62,918	867	966	9,228	4,051	36,747	2,581	1,646	545	760	53,846
Products purchased for resale.....do....	43,947	44	77	464	913	8,496	295	276	91	98	-	-
Fuel purchased.....do....	26,376	8,399	175	471	2,574	1,029	3,990	1,287	666	257	301	7,227
Electric energy purchased.....do....	1,888	688	14	16	98	97	93	31	30	7	9	805
Subcontract work.....do....	13,696	1,374	96	307	785	64	575	239	571	115	206	9,364
Purchased machinery installed.....do....	62,010	22,134	199	984	6,595	2,252	9,189	2,956	1,557	543	262	15,339
Capital expenditures, total.....do....	68,154	23,999	285	780	6,978	3,555	8,143	3,050	1,965	710	282	18,407
Development and exploration of mineral properties.....do....	348	80	-	-	11	-	-	-	-	2	-	255
New structures and additions.....do....	7,461	4,124	88	39	264	162	256	189	116	129	120	1,974
New machinery and equipment.....do....	53,827	18,695	176	642	5,533	2,956	7,828	2,003	1,413	571	152	13,858
Used plant and equipment.....do....	6,518	1,100	21	99	1,170	437	59	858	436	8	10	2,320

See footnotes at end of table.

TABLE 3B. Detailed Statistics for Industries, by Principal Types of Services: 1963—Continued

Item	138.— Oil and gas field services industries, total	1381.—Drilling oil and gas wells industry							1382.—Oil and gas explo- ration services industry			
		Total	Drilling oil, gas, dry, and service wells			Drilling in, spudding in, tailing in, and reworking wells			Total	Geo- physical explora- tion	Other explora- tion	
			Total	With well opera- tions	Without well opera- tions	Total	With well opera- tions	Without well opera- tions				
Energy used <sup>1</sup> .....million kwh.equivalent..	24,601	18,103	16,804	2,578	14,226	1,299	135	1,164	677	618	59	
Fuels produced and used for fuel at same establishment:												
Crude petroleum.....1,000 barrels..	5	5	5	5	-	-	-	-	-	-	-	
Natural gas.....million cu. ft..	814	802	802	802	-	-	-	-	-	-	-	
Fuels purchased:												
Distillate fuel oil.....1,000 barrels..	2,441	2,109	1,992	272	1,720	117	7	110	63	49	14	
Residual fuel oil.....do....	534	490	453	93	360	37	15	22	1	1	(2)	
Gas.....million cu. ft..	27,492	25,002	24,367	2,223	22,144	635	189	446	51	51	-	
Gasoline.....1,000 gallons..	98,946	22,351	15,871	3,996	11,875	6,480	544	5,936	11,909	11,336	573	
Other fuels.....\$1,000..	13,281	11,190	9,890	3,125	6,765	1,300	33	1,267	333	315	18	
Undistributed.....do....	14,837	8,127	7,010	317	6,693	1,117	26	1,091	114	76	38	
Electric energy purchased.....million kwh..	290	144	132	23	109	12	3	9	9	8	1	
Electric energy generated and used.....do....	486	352	348	90	258	4	-	4	(D)	(D)	(D)	
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	10,187	5,253	4,373	821	3,552	880	70	810	877	816	61	
Per production worker.....hp..	105	104	106	109	107	92	111	91	121	119	167	
Prime movers.....1,000 hp..	10,063	5,174	4,312	791	3,521	862	67	795	874	813	61	
Electric motors driven by purchased energy....do....	124	79	61	30	31	18	3	15	3	3	-	
Horsepower rating of electric motors driven by energy generated at same establishment.....do....	257	220	216	15	201	5	(2)	4	31	24	7	
Item	1389.—Oil and gas field services, n.e.c., industry											
	Total	Well surveying, well logging, and cementing wells	Building (erecting, repairing, and dis- mantling rigs and derricks	Exca- vating slush pits and cellars	Running, cutting, and pulling casing, tubes, and rods	Per- forating well casing	Acidizing and other chemical treatment of wells	Cleaning out, bailing out, and swabbing wells	Install- ing pro- duction equipment	Erecting, cleaning, repairing, and dis- mantling lease tanks	Pumping wells but not operating leases	Other oil and gas field services, n.e.c.
Energy used <sup>1</sup> .....million kwh. equivalent..	5,821	1,521	51	107	618	265	642	316	149	54	96	2,002
Fuels produced and used for fuel at same establishment:												
Crude petroleum.....1,000 barrels..	-	-	-	-	-	-	-	-	-	-	-	-
Natural gas.....million cu. ft..	12	-	-	-	-	-	-	-	-	-	4	8
Fuels purchased:												
Distillate fuel oil.....1,000 barrels..	269	5	2	13	15	(2)	28	9	11	-	(2)	186
Residual fuel oil.....do....	43	-	-	1	9	1	24	1	-	-	-	7
Gas.....million cu. ft..	2,439	707	3	6	183	2	249	99	78	-	-	1,112
Gasoline.....1,000 gallons..	64,686	28,365	285	870	5,122	920	12,172	2,107	2,138	583	40	12,084
Other fuels.....\$1,000..	1,758	196	10	70	400	-	16	248	27	-	29	762
Undistributed.....do....	6,596	691	139	128	952	928	82	540	83	137	357	2,559
Electric energy purchased.....million kwh..	137	48	1	1	5	3	6	1	1	(2)	(2)	70
Electric energy generated and used.....do....	(D)	(2)	-	-	(2)	-	-	1	(2)	-	-	(D)
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	4,057	1,138	46	109	467	152	407	219	154	36	84	1,249
Per production worker.....hp..	104	138	71	211	88	176	147	91	82	78	176	81
Prime movers.....1,000 hp..	4,015	1,126	45	104	464	151	404	218	153	36	83	1,235
Electric motors driven by purchased energy....do....	42	12	1	5	3	1	3	1	1	-	1	14
Horsepower rating of electric motors driven by energy generated at same establishment.....do....	6	-	-	-	2	-	-	-	-	-	-	4

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
 (Z) Less than one-half of the unit of measure specified.  
 n.e.c. Not elsewhere classified.  
<sup>1</sup>Excludes fuels furnished without charge by oil and gas companies for whom work was performed.

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
INDUSTRY 1381.--DRILLING OIL AND GAS WELLS											
Establishments.....number..	2,836	1,168	431	491	483	177	72	11	3	-	-
All employees:											
Total.....do....	155,416	1,973	2,890	6,858	15,131	12,077	10,314	3,601	2,158	-	-
Payroll.....\$1,000..	1318,150	10,247	12,715	31,788	80,926	70,201	67,432	26,283	14,931	-	-
Production, development, and exploration workers:											
Total.....number..	50,333	1,944	2,560	6,236	13,836	10,986	9,499	3,338	1,934	-	-
Man-hours.....1,000..	106,266	3,844	5,019	12,545	28,264	22,812	21,615	7,489	4,678	-	-
Wages.....\$1,000..	281,064	10,108	11,389	28,689	73,117	62,760	58,635	23,724	12,642	-	-
Value added in mining.....do....	653,337	30,687	31,426	69,070	163,155	142,686	129,777	58,097	28,439	-	-
Receipts for services and shipments.....do....	979,316	42,555	42,492	96,410	240,877	214,933	210,430	87,676	43,943	-	-
Capital expenditures.....do....	148,026	8,448	5,603	10,361	25,003	36,738	25,781	15,529	20,563	-	-
Establishments, by principal type of service:											
Drilling oil, gas, dry, or service wells, total.....number..	2,218	952	314	366	367	143	63	10	3	-	-
With well operations.....do....	337	67	50	89	85	36	10	-	-	-	-
Without well operations.....do....	1,881	885	264	277	282	107	53	10	3	-	-
Drilling in, spudding in, and tailing in, total.....do....	179	80	42	30	20	6	-	1	-	-	-
With well operations.....do....	15	5	3	2	2	3	-	-	-	-	-
Without well operations.....do....	164	75	39	28	18	3	-	1	-	-	-
Reworking wells, total.....do....	439	136	75	95	96	28	9	-	-	-	-
With well operations.....do....	28	5	5	14	3	1	-	-	-	-	-
Without well operations.....do....	411	131	70	81	93	27	9	-	-	-	-
INDUSTRY 1382.--OIL AND GAS FIELD EXPLORATION SERVICES											
Establishments.....number..	373	225	35	45	33	13	16	4	2	-	-
All employees:											
Total.....do....	18,683	316	226	578	1,004	815	2,489	3,080	(D)	-	-
Payroll.....\$1,000..	147,828	2,023	1,150	2,843	4,847	4,085	12,863	18,376	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	7,232	267	184	508	899	718	2,028	2,628	(D)	-	-
Man-hours.....1,000..	16,246	603	420	1,199	1,957	1,727	4,459	5,881	(D)	-	-
Wages.....\$1,000..	36,915	1,824	949	2,469	4,229	3,388	10,169	13,887	(D)	-	-
Value added in mining.....do....	89,988	6,040	2,013	5,872	8,793	6,632	22,272	38,366	(D)	-	-
Receipts for services and shipments.....do....	119,824	8,952	2,757	7,635	11,080	9,520	32,633	47,247	(D)	-	-
Capital expenditures.....do....	11,726	763	223	734	653	838	2,873	5,642	(D)	-	-
Establishments, by principal type of service:											
Geophysical exploration, total.....number..	299	166	31	38	31	12	15	4	2	-	-
With well operations.....do....	4	4	-	-	-	-	-	-	-	-	-
Without well operations.....do....	295	162	31	38	31	12	15	4	2	-	-
Other exploration, total.....do....	74	59	4	7	2	1	1	-	-	-	-
With well operations.....do....	1	1	-	-	-	-	-	-	-	-	-
Without well operations.....do....	73	58	4	7	2	1	1	-	-	-	-
INDUSTRY 1389.--OIL AND GAS FIELD SERVICES, N.E.C.											
Establishments.....number..	3,003	1,575	530	464	320	75	26	5	3	3	2
All employees:											
Total.....do....	48,274	2,868	3,598	6,435	10,118	5,050	3,680	3,433	(D)	13,092	(D)
Payroll.....\$1,000..	265,749	12,006	15,359	28,735	46,170	20,573	20,813	24,201	(D)	97,892	(D)
Production, development, and exploration workers:											
Total.....number..	39,028	2,696	2,958	5,299	8,753	4,361	3,186	2,441	(D)	9,334	(D)
Man-hours.....1,000..	84,076	5,260	5,810	10,738	17,546	8,704	6,375	6,440	(D)	23,203	(D)
Wages.....\$1,000..	199,414	11,067	12,421	23,501	38,586	18,273	16,126	12,897	(D)	66,543	(D)
Value added in mining.....do....	498,029	36,563	31,890	56,168	85,797	37,270	30,206	45,687	(D)	174,448	(D)
Receipts for services and shipments.....do....	718,754	50,503	40,739	70,347	106,055	48,022	40,115	68,131	(D)	294,842	(D)
Capital expenditures.....do....	68,154	5,243	4,331	6,148	10,366	4,410	2,933	6,807	(D)	27,916	(D)
Survey, Log, Cement Services Subindustry											
Establishments.....number..	268	145	51	43	20	3	3	-	1	-	2
All employees:											
Total.....do....	11,138	202	343	589	564	159	510	-	8,771	-	(D)
Payroll.....\$1,000..	81,805	1,055	1,932	3,030	3,624	1,174	3,893	-	67,097	-	(D)
Production, development, and exploration workers:											
Total.....number..	8,251	152	248	456	467	125	431	-	6,372	-	(D)
Man-hours.....1,000..	20,584	356	569	1,049	1,190	260	1,270	-	15,890	-	(D)
Wages.....\$1,000..	55,201	793	1,364	2,419	2,879	1,006	3,176	-	43,564	-	(D)
Value added in mining.....do....	173,821	5,086	4,419	7,262	6,914	1,808	6,539	-	141,793	-	(D)
Receipts for services and shipments.....do....	245,335	6,666	5,368	8,594	8,535	3,111	9,239	-	203,822	-	(D)
Capital expenditures.....do....	23,999	421	749	456	1,243	609	787	-	19,734	-	(D)

See footnotes at end of table.

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963—Continued

Item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
Miscellaneous Oil and Gas Field Services Subindustry											
Establishments.....number..	2,735	1,430	479	421	300	72	23	5	2	3	-
All employees:											
Total.....do....	37,136	2,666	3,255	5,846	9,554	4,891	3,170	7,754	(D)	(D)	-
Payroll.....\$1,000..	183,944	10,951	13,427	25,705	42,546	19,399	16,920	54,996	(D)	(D)	-
Production, development, and exploration workers:											
Total.....number..	30,777	2,544	2,710	4,843	8,286	4,236	2,755	5,403	(D)	(D)	-
Man-hours.....1,000..	63,492	4,904	5,241	9,689	16,356	8,444	5,105	13,753	(D)	(D)	-
Wages.....\$1,000..	144,213	10,274	11,057	21,082	35,707	17,267	12,950	35,876	(D)	(D)	-
Value added in mining.....do....	324,208	31,477	27,471	48,906	78,883	35,462	23,667	78,342	(D)	(D)	-
Receipts for services and shipments.....do....	473,419	43,837	35,371	61,753	97,520	44,911	30,876	159,151	(D)	(D)	-
Capital expenditures.....do....	44,155	4,822	3,582	5,692	9,123	3,801	2,146	14,989	(D)	(D)	-
Establishments, by principal type of service:											
Well surveying and well logging, total.....number..	220	124	38	34	17	2	3	-	1	-	1
With well operations.....do....	2	1	-	1	-	-	-	-	-	-	-
Without well operations.....do....	218	123	38	33	17	2	3	-	1	-	1
Cementing wells (without well operations).....do....	48	21	13	9	3	1	-	-	-	-	1
Building (erecting), repairing, or dismantling rigs and derricks (without well operations).....do....	57	29	11	5	9	1	1	-	-	1	-
Excavating slush pits or cellars (without well operations).....do....	56	26	12	9	7	2	-	-	-	-	-
Running, cutting, and pulling casing, tubes, or rods, total.....do....	506	241	94	84	67	17	2	1	-	-	-
With well operations.....do....	21	7	3	3	7	1	-	-	-	-	-
Without well operations.....do....	485	234	91	81	60	16	2	1	-	-	-
Perforating well casing (without well operations).....do....	60	34	11	7	5	3	-	-	-	-	-
Acidizing and other chemical treatment of wells (without well operations).....do....	70	37	11	12	6	1	-	-	2	1	-
Cleaning out, bailing out, or swabbing wells, total.....do....	273	130	57	45	36	5	-	-	-	-	-
With well operations.....do....	12	5	5	1	1	-	-	-	-	-	-
Without well operations.....do....	261	125	52	44	35	5	-	-	-	-	-
Installing production equipment, total.....do....	140	50	25	31	27	5	1	1	-	-	-
With well operations.....do....	4	1	1	1	1	-	-	-	-	-	-
Without well operations.....do....	136	49	24	30	26	5	1	1	-	-	-
Erecting, cleaning, repairing, or dismantling lease tanks, total.....do....	55	30	12	8	3	1	1	-	-	-	-
With well operations.....do....	2	1	-	-	-	-	-	-	-	-	-
Without well operations.....do....	53	29	11	8	3	1	1	-	-	-	-
Pumping wells but not operating leases, total.....do....	135	107	13	10	4	-	1	-	-	-	-
With well operations.....do....	9	8	-	-	1	-	-	-	-	-	-
Without well operations.....do....	126	99	13	10	3	-	1	-	-	-	-
Other oil and gas field services, n.e.c., total.....do....	1,383	746	233	210	136	37	17	3	-	1	-
With well operations.....do....	80	46	17	10	7	-	-	-	-	-	-
Without well operations.....do....	1,303	700	216	200	129	37	17	3	-	1	-

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.

n.e.c. Not elsewhere classified.

Includes figures for separately reported central offices and related facilities. These were not included in the figures distributed by size of establishment.

**TABLE 5A. Industry-Product Analysis--Summary of Industry Receipts and Shipments and Receipts for Primary Services: 1963 and 1958**

(In thousands of dollars)

Ind. code	Industry or subindustry and year	Value of shipments and receipts for services of establishments classified in the industry or subindustry					Receipts for primary services		
		Total	Receipts for primary services	Secondary products	Receipts for secondary services	Products purchased and resold without further processing	Total (received in all industries)	Received in this industry or subindustry	Received in other industries or subindustries
1381	Drilling oil and gas wells.....1963...	979,316	906,107	45,767	22,672	4,770	951,474	906,107	45,367
	.....1958...	904,939	842,509	49,515	10,697	2,218	895,267	842,509	52,758
1382	Oil and gas exploration services.....1963...	119,824	107,589	73	4,042	8,120	112,135	107,589	4,546
	.....1958...	87,215	83,991	24	2,093	1,107	84,647	83,991	656
1389	Oil and gas field services, n.e.c.....1963...	718,754	623,996	4,737	21,326	68,695	666,096	623,996	42,100
	.....1958...	633,729	560,656	1,897	13,149	58,027	578,104	560,656	17,448
	Survey, log, cement services subindustry.....1963...	245,335	168,355	46	27,413	49,521	205,854	168,355	37,499
	.....1958...	220,829	150,361	24	24,130	46,314	181,215	150,361	30,854
	Miscellaneous oil and gas field services subindustry.....1963...	473,419	393,163	4,691	56,391	19,174	460,242	393,163	67,079
	.....1958...	412,900	357,713	1,873	41,601	11,713	396,889	357,713	39,176

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.

**TABLE 5B. Classes of Primary Services, by Industry and Subindustries: 1963**

(In thousands of dollars)

Ind. code	Industry group, industry, or subindustry	Receipts for--			
		Drilling oil and gas well services	Oil and gas field exploration services	Well surveying, well logging, and cementing wells services	Miscellaneous oil and gas field services
13	OIL AND GAS EXTRACTION INDUSTRIES, TOTAL.....	951,474	112,135	205,854	1460,242
138	Oil and gas field services industries, total.....	920,939	109,437	205,746	441,714
1381	Drilling oil and gas wells industry.....	906,107	309	436	20,527
1382	Oil and gas exploration services industry.....	1,618	107,589	1,530	971
1389	Oil and gas field services, n.e.c., industry, total.....	13,214	1,539	203,780	420,216
	Survey, log, cement services subindustry.....	41	38	168,355	27,053
	Miscellaneous oil and gas field services subindustry.....	13,173	1,501	35,425	393,163
1311	Crude petroleum and natural gas industry, total.....	30,535	12,698	108	117,458
	Crude petroleum subindustry.....	27,955	12,656	106	115,929
	Natural gas subindustry.....	2,580	42	2	1,529
1321	Natural gas liquids industry.....	-	-	-	1,070

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.

\*Includes receipts for oil and gas field services in other mineral services industries and in manufacturing industries amounting to less than \$4 million for oil and gas field exploration services and miscellaneous oil and gas field services combined.

# TABLE 6A. Primary Services of the Industries, by Geographic Areas: 1963 and 1958

(In general, contractors prepared one report for all oil and gas field services performed in the United States. These reports were classified on the basis of the principal State in which the service was performed. Separate data were contained in these reports for the various kinds of work performed)

Type of service and geographic area	Receipts for services (\$1,000)		Type of service and geographic area	Receipts for services (\$1,000)	
	1963	1958		1963	1958
<u>DRILLING OIL AND GAS WELLS SERVICES</u>			<u>DRILLING OIL AND GAS WELLS SERVICES--Continued</u>		
UNITED STATES			SOUTH ATLANTIC DIVISION--Continued		
Drilling oil and gas wells, total.....	951,474	1,895,267	West Virginia		
Drilling oil, gas, dry, and service wells.....	822,864	822,252	Drilling oil and gas wells, total.....	13,965	6,672
Drilling in, spudding in, and tailing in.....	28,074	73,015	Drilling oil, gas, dry, and service wells and reworking wells.....	13,390	6,672
Reworking wells.....	100,536		Drilling in, spudding in, and tailing in.....	575	
MIDDLE ATLANTIC DIVISION			EAST SOUTH CENTRAL DIVISION		
Drilling oil and gas wells, total.....	10,077	13,271	Drilling oil and gas wells, total.....	43,617	30,810
Drilling oil, gas, dry, and service wells.....	9,291	12,487	Drilling oil, gas, dry, and service wells.....	37,222	29,824
Drilling in, spudding in, tailing in and reworking wells.....	786	784	Drilling in, spudding in, and tailing in.....	680	986
New York			Reworking wells.....	5,715	
Drilling oil and gas wells.....	1,557	720	Kentucky		
Drilling oil, gas, dry, and service wells.....	1,328	(NA)	Drilling oil and gas wells.....	7,937	10,322
Pennsylvania			Alabama		
Drilling oil and gas wells, total.....	8,520	12,551	Drilling oil and gas wells.....	5,237	1,570
Drilling oil, gas, dry, and service wells.....	7,963	(NA)	Mississippi		
Drilling in, spudding in, tailing in, and reworking wells.....	557	(NA)	Drilling oil and gas wells, total.....	30,350	18,841
EAST NORTH CENTRAL DIVISION			Drilling oil, gas, dry, and service wells.....	25,284	18,789
Drilling oil and gas wells, total.....	41,152	39,356	Drilling in, spudding in, tailing in, and reworking wells.....	5,066	52
Drilling oil, gas, dry, and service wells.....	34,275	33,897	WEST SOUTH CENTRAL DIVISION		
Drilling in, spudding in, and tailing in.....	4,077	5,459	Drilling oil and gas wells, total.....	645,895	609,118
Reworking wells.....	2,800		Drilling oil, gas, dry, and service wells.....	557,973	562,076
Ohio			Drilling in, spudding in, and tailing in.....	12,503	47,042
Drilling oil and gas wells, total.....	11,490	7,346	Reworking wells.....	75,419	
Drilling oil, gas, dry, and service wells.....	10,726	7,042	Arkansas		
Drilling in, spudding in, tailing in, and reworking wells.....	764	304	Drilling oil and gas wells, total.....	8,767	5,920
Indiana			Drilling oil, gas, dry, and service wells.....	7,301	5,515
Drilling oil and gas wells, total.....	4,076	4,134	Drilling in, spudding in, and tailing in.....	762	405
Drilling oil, gas, dry, and service wells.....	3,149	3,737	Reworking wells.....	704	
Drilling in, spudding in, tailing in, and reworking wells.....	927	397	Louisiana		
Illinois			Drilling oil and gas wells, total.....	246,403	214,205
Drilling oil and gas wells, total.....	15,326	20,868	Drilling oil, gas, dry, and service wells.....	224,021	203,693
Drilling oil, gas, dry, and service wells.....	12,090	16,466	Drilling in, spudding in, and tailing in.....	1,582	10,512
Drilling in, spudding in, and tailing in.....	1,957	4,402	Reworking wells.....	20,800	
Reworking wells.....	1,279		North Louisiana:	Drilling oil and gas wells, total.....	29,686
Michigan			Drilling oil, gas, dry, and service wells.....	26,874	(NA)
Drilling oil and gas wells, total.....	10,260	7,008	Drilling in, spudding in, and tailing in.....	302	(NA)
Drilling oil, gas, dry, and service wells.....	8,310	6,652	Reworking wells.....	2,510	
Drilling in, spudding in, and tailing in.....	1,628	356	South Louisiana:		
Reworking wells.....	322		Drilling oil and gas wells, total.....	216,717	(NA)
WEST NORTH CENTRAL DIVISION			Drilling oil, gas, dry, and service wells.....	197,147	(NA)
Drilling oil and gas wells, total.....	45,143	48,527	Drilling in, spudding in, and tailing in.....	1,280	(NA)
Drilling oil, gas, dry, and service wells.....	39,160	42,797	Reworking wells.....	18,290	
Drilling in, spudding in, and tailing in.....	3,413	5,730	Oklahoma		
Reworking wells.....	2,570		Drilling oil and gas wells, total.....	78,815	80,446
North Dakota			Drilling oil, gas, dry, and service wells.....	65,897	73,063
Drilling oil and gas wells, total.....	3,809	9,503	Drilling in, spudding in, and tailing in.....	2,548	7,383
Drilling oil, gas, dry, and service wells.....	3,224	9,425	Reworking wells.....	10,370	
Drilling in, spudding in, tailing in, and reworking wells.....	585	78	Texas		
Nebraska			Drilling oil and gas wells, total.....	311,910	308,547
Drilling oil and gas wells.....	4,718	4,550	Drilling oil, gas, dry, and service wells.....	260,754	279,805
Drilling oil, gas, dry, and service wells.....	4,316	4,094	Drilling in, spudding in, and tailing in.....	7,611	28,742
Kansas			Reworking wells.....	43,545	
Drilling oil and gas wells, total.....	36,048	33,974	Texas Gulf Coast A:		
Drilling oil, gas, dry, and service wells.....	31,052	28,797	Drilling oil and gas wells, total.....	47,264	(NA)
Drilling in, spudding in, and tailing in.....	3,027	5,177	Drilling oil, gas, dry, and service wells.....	28,959	(NA)
Reworking wells.....	1,969		Drilling in, spudding in, and tailing in.....	2,252	(NA)
SOUTH ATLANTIC DIVISION			Reworking wells.....	16,053	
Drilling oil and gas wells, total.....	14,519	7,036	Texas Gulf Coast B:		
Drilling oil, gas, dry, and service wells.....	13,437	6,830	Drilling oil and gas wells, total.....	15,473	(NA)
Drilling in, spudding in, and tailing in.....	575	206	Drilling oil, gas, dry, and service wells.....	11,341	(NA)
Reworking wells.....	507		Drilling in, spudding in, and tailing in.....	207	(NA)
			Reworking wells.....	3,925	

See footnotes at end of table.



TABLE 6A. Primary Services of the Industries, by Geographic Areas: 1963 and 1958 -Continued

Type of service and geographic area	Receipts for services (\$1,000)		Type of service and geographic area	Receipts for services (\$1,000)	
	1963	1958		1963	1958
<u>DRILLING OIL AND GAS WELLS SERVICES—Continued</u>			<u>DRILLING OIL AND GAS WELLS SERVICES—Continued</u>		
WEST SOUTH CENTRAL DIVISION—Continued			MOUNTAIN DIVISION—Continued		
Texas—Continued			New Mexico		
South Texas:			Drilling oil and gas wells, total.....	39,911	37,872
Drilling oil and gas wells, total.....	37,319	(NA)	Drilling oil, gas, dry, and service wells.....	35,038	32,107
Drilling oil, gas, dry, and service wells.....	31,190	(NA)	Drilling in, spudding in, and tailing in.....	127	5,765
Drilling in, spudding in, and tailing in.....	1,468	(NA)	Reworking wells.....	4,746	
Reworking wells.....	4,661				
Southwest Texas:			PACIFIC DIVISION		
Drilling oil and gas wells, total.....	8,606	(NA)	Drilling oil and gas wells, total.....	53,189	144,740
Drilling oil, gas, dry, and service wells.....	7,801	(NA)	Drilling oil, gas, dry, and service wells.....	46,129	41,490
Drilling in, spudding in, and tailing in.....	81	(NA)	Drilling in, spudding in, and tailing in.....	3,712	3,250
Reworking wells.....	724		Reworking wells.....	3,348	
North Central Texas A:			California		
Drilling oil and gas wells, total.....	23,046	(NA)	Drilling oil and gas wells, total.....	46,895	(NA)
Drilling oil, gas, dry, and service wells.....	20,692	(NA)	Drilling oil, gas, dry, and service wells.....	39,835	(NA)
Drilling in, spudding in, and tailing in.....	822	(NA)	Drilling in, spudding in, and tailing in.....	3,712	(NA)
Reworking wells.....	1,532		Reworking wells.....	3,348	
North Central Texas B:			Washington and Alaska		
Drilling oil and gas wells, total.....	13,454	(NA)	Drilling oil and gas wells (drilling oil, gas, dry, and	6,294	(NA)
Drilling oil, gas, dry, and service wells.....	12,159	(NA)	service wells).....		
Drilling in, spudding in, and tailing in.....	468	(NA)			
Reworking wells.....	827		<u>OIL AND GAS FIELD EXPLORATION SERVICES</u>		
East Texas A:			UNITED STATES		
Drilling oil and gas wells, total.....	14,408	(NA)	Oil and gas field exploration services, total.....	112,135	384,647
Drilling oil, gas, dry, and service wells.....	10,472	(NA)	Geophysical exploration.....	100,102	78,613
Drilling in, spudding in, and tailing in.....	222	(NA)	Other exploration.....	12,033	6,034
Reworking wells.....	3,714				
East Texas B:			MIDDLE ATLANTIC AND EAST NORTH CENTRAL DIVISIONS		
Drilling oil and gas wells, total.....	14,781	(NA)	Oil and gas field exploration services, total.....	2,656	1,056
Drilling oil, gas, dry, and service wells.....	12,830	(NA)	Geophysical exploration.....	1,405	(NA)
Drilling in, spudding in, and tailing in.....	175	(NA)	Other exploration.....	1,251	(NA)
Reworking wells.....	1,776				
West Texas A:			WEST NORTH CENTRAL DIVISION <sup>4</sup>		
Drilling oil and gas wells, total.....	100,306	(NA)	Oil and gas field exploration services.....	3,824	3,084
Drilling oil, gas, dry, and service wells.....	91,967	(NA)	Geophysical exploration.....	3,471	(NA)
Drilling in, spudding in, and tailing in.....	1,045	(NA)			
Reworking wells.....	7,294		SOUTH ATLANTIC AND EAST SOUTH CENTRAL DIVISIONS		
West Texas B:			Mississippi		
Drilling oil and gas wells, total.....	18,185	(NA)	Oil and gas field exploration services.....	2,337	3,714
Drilling oil, gas, dry, and service wells.....	16,893	(NA)			
Drilling in, spudding in, and tailing in.....	92	(NA)	WEST SOUTH CENTRAL DIVISION		
Reworking wells.....	1,200		Oil and gas field exploration services, total.....	72,701	62,194
Texas Panhandle:			Geophysical exploration.....	69,184	58,599
Drilling oil and gas wells, total.....	19,068	(NA)	Other exploration.....	3,517	3,595
Drilling oil, gas, dry, and service wells.....	16,450	(NA)			
Drilling in, spudding in, and tailing in.....	779	(NA)	Louisiana		
Reworking wells.....	1,839		Oil and gas field exploration services.....	19,571	22,884
MOUNTAIN DIVISION			Geophysical exploration.....	19,190	(NA)
Drilling oil and gas wells, total.....	97,882	102,409	South Louisiana:		
Drilling oil, gas, dry, and service wells.....	85,377	92,851	Oil and gas field exploration services.....	18,991	(NA)
Drilling in, spudding in, and tailing in.....	2,823	9,558			
Reworking wells.....	9,682		Arkansas and Oklahoma		
Montana			Oil and gas field exploration services.....	7,143	4,543
Drilling oil and gas wells, total.....	14,234	25,755	Geophysical exploration.....	7,038	(NA)
Drilling oil, gas, dry, and service wells.....	11,929	25,541			
Drilling in, spudding in, and tailing in.....	796	214	Texas		
Reworking wells.....	1,509		Oil and gas field exploration services, total.....	45,987	34,767
Wyoming			Geophysical exploration.....	42,958	31,923
Drilling oil and gas wells, total.....	25,983	25,780	Other exploration.....	3,029	2,844
Drilling oil, gas, dry, and service wells.....	22,565	24,114			
Drilling in, spudding in, and tailing in.....	1,440	1,666	Texas Gulf Coast A:		
Reworking wells.....	1,978		Oil and gas exploration services.....	11,926	(NA)
Colorado			East Texas A:		
Drilling oil and gas wells, total.....	8,700	15,673	Oil and gas exploration services.....	16,305	(NA)
Drilling oil, gas, dry, and service wells.....	6,895	13,760			
Drilling in, spudding in, and tailing in.....	356	1,913	West Texas A:		
Reworking wells.....	1,449		Oil and gas exploration services.....	7,279	(NA)
			MOUNTAIN DIVISION		
			Oil and gas field exploration services.....	9,748	11,956
			Geophysical exploration.....	6,258	(NA)

See footnotes at end of table.

TABLE 6A. Primary Services of the Industries, by Geographic Areas: 1963 and 1958—Continued

Type of service and geographic area	Receipts for services (\$1,000)		Type of service and geographic area	Receipts for services (\$1,000)	
	1963	1958		1963	1958
<u>OIL AND GAS FIELD EXPLORATION SERVICES—Continued</u>			<u>OIL AND GAS FIELD EXPLORATION SERVICES—Continued</u>		
MOUNTAIN DIVISION—Continued			EAST NORTH CENTRAL DIVISION—Continued		
Montana			Michigan		
Oil and gas field exploration services.....	866	(NA)	Oil and gas field services, n.e.c.....	2,340	1,018
Wyoming			WEST NORTH CENTRAL DIVISION		
Oil and gas field exploration services, total.....	4,010	2,299	Oil and gas field services, n.e.c.....	28,907	19,420
Geophysical exploration.....	2,309	(NA)	Well surveying and well logging.....	1,106	1,188
Other exploration.....	1,701	(NA)	Cementing wells.....	1,654	1,169
Colorado			Excavating slush pits and cellars.....	844	1,059
Oil and gas field exploration services, total.....	1,844	(NA)	Running, cutting, and pulling casing, tubes, and rods.....	5,902	6,408
Geophysical exploration.....	698	(NA)	Perforating well casing.....	697	(NA)
Other exploration.....	1,146	(NA)	Acidizing and other chemical treatment of wells.....	1,313	(NA)
New Mexico			Cleaning out, bailing out, and swabbing wells.....	1,220	1,419
Oil and gas field exploration services.....	2,184	7,100	Installing production equipment, such as wellhead		
Geophysical exploration.....	2,088	(NA)	fittings, pumps, and engines.....	2,075	1,482
Utah			Pumping wells but not operating leases.....	828	(NA)
Oil and gas field exploration services.....	618	(NA)	North Dakota		
PACIFIC DIVISION			Oil and gas field services, n.e.c.....	4,794	2,913
Oil and gas field exploration services.....	20,095	32,398	Running, cutting, and pulling casing, tubes, and rods	1,459	(NA)
California			Nebraska		
Oil and gas field exploration services.....	13,679	(NA)	Oil and gas field services, n.e.c.....	3,055	2,069
Washington and Alaska			Kansas		
Oil and gas field exploration services.....	6,381	(NA)	Oil and gas field services, n.e.c.....	21,005	14,385
<u>OIL AND GAS FIELD SERVICES, N.E.C.</u>			Well surveying, well logging, and cementing wells....	2,458	(NA)
UNITED STATES			Running, cutting, and pulling casing, tubes, and rods	4,348	5,724
Oil and gas field services, n.e.c., total.....	665,016	358,104	Perforating well casing.....	658	(NA)
Well surveying and well logging.....	119,277	99,547	Cleaning out, bailing out, and swabbing wells.....	867	(NA)
Cementing wells.....	86,567	81,668	Installing production equipment, such as wellhead		
Building, repairing, and dismantling rigs and			fittings, pumps, and engines.....	1,154	(NA)
derricks.....	6,644	10,154	Pumping wells but not operating leases.....	576	(NA)
Excavating slush pits and cellars.....	7,171	8,833	SOUTH ATLANTIC DIVISION		
Running, cutting, and pulling casing, tubes, and rods.....	57,935	55,288	Oil and gas field services, n.e.c.....	2,753	1,669
Perforating well casing.....	30,533	39,164	West Virginia		
Acidizing and other chemical treatment of wells.....	77,198	69,440	Oil and gas field services, n.e.c.....	2,533	(NA)
Cleaning out, bailing out, and swabbing wells.....	36,184	39,329	EAST SOUTH CENTRAL DIVISION		
Installing production equipment, such as wellhead			Oil and gas field services, n.e.c.....	11,824	8,723
fittings, pumps, and engines.....	24,055	16,812	Well surveying, well logging, and cementing wells....	1,973	(NA)
Erecting, cleaning, repairing, and dismantling lease			Running, cutting, and pulling casing, tubes, and rods	1,812	2,129
tanks.....	5,853	6,558	Cleaning out, bailing out, and swabbing wells.....	623	1,153
Pumping wells but not operating leases.....	7,963	5,554	Installing production equipment, such as wellhead		
Other oil and gas field services.....	205,636	145,757	fittings, pumps, and engines.....	2,403	(NA)
MIDDLE ATLANTIC DIVISION			Kentucky		
Oil and gas field services, n.e.c.....	3,192	3,189	Oil and gas field services, n.e.c.....	3,782	(NA)
Running, cutting, and pulling casing, tubes, and rods.	640	(NA)	Running, cutting, and pulling casing, tubes, and rods	642	(NA)
New York			Alabama		
Oil and gas field services, n.e.c.....	699	(NA)	Oil and gas field services, n.e.c.....	1,702	(NA)
Pennsylvania			Mississippi		
Oil and gas field services, n.e.c.....	2,493	(NA)	Oil and gas field services, n.e.c.....	6,340	6,080
Running, cutting, and pulling casing, tubes, and rods.	515	(NA)	Running, cutting, and pulling casing, tubes, and rods	1,170	1,873
EAST NORTH CENTRAL DIVISION			Installing production equipment, such as wellhead		
Oil and gas field services, n.e.c.....	14,570	9,080	fittings, pumps, and engines.....	914	(NA)
Well surveying and well logging.....	666	1,886	WEST SOUTH CENTRAL DIVISION		
Cementing wells.....	689		Oil and gas field services, n.e.c.....	528,803	489,720
Running, cutting, and pulling casing, tubes, and rods.....	3,641	2,664	Well surveying and well logging.....	108,933	93,695
Cleaning out, bailing out, and swabbing wells.....	1,659	(NA)	Cementing wells.....	81,696	77,401
Installing production equipment, such as wellhead			Building, repairing, and dismantling rigs and		
fittings, pumps, and engines.....	1,076	(NA)	derricks.....	5,342	7,020
Ohio			Excavating slush pits and cellars.....	4,535	5,614
Oil and gas field services, n.e.c.....	2,631	(NA)	Running, cutting, and pulling casing, tubes, and rods	36,457	37,288
Running, cutting, and pulling casing, tubes, and rods.	1,287	(NA)	Perforating well casing.....	25,909	37,749
Illinois			Acidizing and other chemical treatment of wells.....	72,536	66,838
Oil and gas field services, n.e.c.....	8,904	6,482	Cleaning out, bailing out, and swabbing wells.....	24,461	27,506
Well surveying, well logging, and cementing wells....	840	1,676	Installing production equipment, such as wellhead		
Running, cutting, and pulling casing, tubes, and rods.	1,784	1,411	fittings, pumps, and engines.....	15,002	11,883
Cleaning out, bailing out, and swabbing wells.....	1,040	(NA)	Erecting, cleaning, repairing, and dismantling lease		
Installing production equipment, such as wellhead			tanks.....	4,342	4,575
fittings, pumps, and engines.....	917	(NA)	Pumping wells, but not operating leases.....	4,168	3,642
			Other oil and gas field services.....	145,422	116,509

See footnotes at end of table.

TABLE 6A. Primary Services of the Industries, by Geographic Areas: 1963 and 1958—Continued

Type of service and geographic area	Receipts for services (\$1,000)		Type of service and geographic area	Receipts for services (\$1,000)	
	1963	1958		1963	1958
<u>OIL AND GAS FIELD EXPLORATION SERVICES—Continued</u>			<u>OIL AND GAS FIELD EXPLORATION SERVICES—Continued</u>		
WEST SOUTH CENTRAL DIVISION—Continued			MOUNTAIN DIVISION—Continued		
Louisiana			Oil and gas field services, n.e.c.—Continued		
Oil and gas field services, n.e.c.....	165,558	82,460	Installing production equipment, such as wellhead fittings, pumps, and engines.....	2,965	2,610
Well surveying, well logging, and cementing wells....	77,646	(NA)	Erecting, cleaning, repairing, and dismantling lease tanks.....	596	(NA)
Building, repairing, and dismantling rigs and derricks.....	2,678	2,711	Pumping wells but not operating leases.....	558	(NA)
Running, cutting, and pulling casing, tubes, and rods.	4,311	4,263			
Perforating well casing.....	8,472	(NA)	Wyoming		
Cleaning out, bailing out, and swabbing wells.....	4,257	2,782	Oil and gas field services, n.e.c.....	8,699	4,026
Installing production equipment, such as wellhead fittings, pumps, and engines.....	7,136	4,245	Well surveying, well logging, and cementing wells....	1,202	(NA)
Erecting, cleaning, repairing, and dismantling lease tanks.....	549	(NA)	Running, cutting, and pulling casing, tubes, and rods.	1,427	(NA)
			Perforating well casing.....	785	(NA)
Texas			Cleaning out, bailing out, and swabbing wells.....	1,033	(NA)
Oil and gas field services, n.e.c., total.....	322,526	377,755	Installing production equipment, such as wellhead fittings, pumps, and engines.....	569	(NA)
Well surveying, well logging, and cementing wells....	108,388	160,833			
Building, repairing, and dismantling rigs and derricks.....	1,947	3,782	Colorado		
Excavating slush pits and cellars.....	3,065	3,269	Oil and gas field services, n.e.c.....	3,092	(NA)
Running, cutting, and pulling casing, tubes, and rods.	25,491	26,541	Running, cutting, and pulling casing, tubes, and rods.	866	(NA)
Perforating well casing.....	14,860	36,632			
Acidizing and other chemical treatment of wells.....	71,071	65,665	New Mexico		
Cleaning out, bailing out, and swabbing wells.....	14,256	18,220	Oil and gas field services, n.e.c.....	16,436	11,976
Installing production equipment, such as wellhead fittings, pumps, and engines.....	5,706	6,069	Well surveying, well logging, and cementing wells....	979	(NA)
Erecting, cleaning, repairing, and dismantling lease tanks.....	2,679	2,843	Running, cutting, and pulling casing, tubes, and rods.	2,378	2,620
Pumping wells but not operating leases.....	2,733	2,612	Acidizing and other chemical treatment of wells.....	687	(NA)
Other oil and gas field services.....	72,330	51,289	Cleaning out, bailing out, and swabbing wells.....	1,792	1,721
Arkansas and Oklahoma			Utah		
Oil and gas field services, n.e.c., total.....	40,719	29,505	Oil and gas field services, n.e.c.....	3,955	2,243
Well surveying, well logging, and cementing wells....	4,595	3,660	Installing production equipment, such as wellhead fittings, pumps, and engines.....	1,169	(NA)
Building, repairing, and dismantling rigs and derricks.....	717	(NA)			
Excavating slush pits and cellars.....	1,086	1,230	PACIFIC DIVISION		
Running, cutting, and pulling casing, tubes, and rods.	6,655	6,484	Oil and gas field services, n.e.c.....	39,569	<sup>3</sup> 22,502
Perforating well casing.....	2,577	(NA)	Well surveying and well logging.....	4,527	3,198
Acidizing and other chemical treatment of wells.....	1,337	(NA)	Cementing wells.....	781	
Cleaning out, bailing out, and swabbing wells.....	5,948	6,504	Building, repairing, and dismantling rigs and derricks.....	726	2,118
Installing production equipment, such as wellhead fittings, pumps, and engines.....	2,160	1,569	Excavating slush pits and cellars.....	704	(NA)
Erecting, cleaning, repairing, and dismantling lease tanks.....	1,114	1,001	Running, cutting, and pulling casing, tubes, and rods..	3,791	2,021
Pumping wells but not operating leases.....	1,074	(NA)	Perforating well casing.....	1,169	(NA)
Other oil and gas field services.....	13,456	(NA)	Acidizing and other chemical treatment of wells.....	1,095	(NA)
			Cleaning out, bailing out, and swabbing wells.....	3,805	3,668
MOUNTAIN DIVISION			Installing production equipment, such as wellhead fittings, pumps, and engines.....	506	(NA)
Oil and gas field services, n.e.c.....	35,371	23,801			
Well surveying, well logging, and cementing wells....	2,940	1,073	California		
Excavating slush pits and cellars.....	666	1,393	Oil and gas field services, n.e.c.....	38,268	(NA)
Running, cutting, and pulling casing, tubes, and rods.	5,392	3,892	Running, cutting, and pulling casing, tubes, and rods.	3,791	(NA)
Perforating well casing.....	1,365	(NA)	Perforating well casing.....	1,169	(NA)
Acidizing and other chemical treatment of wells.....	1,368	(NA)	Acidizing and other chemical treatment of wells.....	1,095	(NA)
Cleaning out, bailing out, and swabbing wells.....	3,646	3,904	Installing production equipment, such as wellhead fittings, pumps, and engines.....	506	(NA)

(NA) Not available.

n.e.c. Not elsewhere classified.

<sup>1</sup>Excludes data for 2 establishments classified in Alaska.<sup>2</sup>Includes figures for Idaho.<sup>3</sup>Excludes data for one establishment classified in Alaska.<sup>4</sup>For 1963, all reported by establishments classified in Kansas.

**TABLE 6B. Product Classes--Indexes of Production and Unit Value for Primary Services: 1963 and 1958**

Product code	Product and year	Indexes (1954 = 100)	
		Production	Unit value
1381	Drilling oil and gas wells services.....1963..	99	104
	.....1958..	94	106
	Oil wells.....1963..	79	105
	.....1958..	80	106
	Gas wells.....1963..	146	108
	.....1958..	144	116
	Dry holes.....1963..	117	102
	.....1958..	101	104
	Service wells.....1963..	97	124
	.....1958..	79	116

**TABLE 6C. Primary Services of the Oil and Gas Field Services Industries Distributed by Unit Values: 1963**

(Such statistics were not compiled for these industries)

**TABLE 6D. Primary Services of the Oil and Gas Field Services Industries, by County: 1963**

(Such statistics were not compiled separately for these industries)

**TABLE 6E. Drilling Statistics for Oil, Gas, Dry, and Service Wells as Reported by Drilling Contractors for 1963, 1958, 1954, and 1939, and by Geographic Areas: 1963**

Item	United States, total				Middle Atlantic			East North Central				
	1963	1958	1954	1939	Division	New York	Pennsylvania	Division	Ohio	Indiana	Illinois	Michigan
Wells, drilled, total <sup>1</sup> .....number..	36,162	37,977	45,264	12,729	662	178	484	3,602	893	498	1,506	705
Oil wells.....do.....	18,624	21,327	27,447	10,344	340	124	216	1,366	359	190	659	158
Gas wells.....do.....	3,515	3,429	3,103	758	229	27	202	360	210	72	8	70
Dry holes.....do.....	12,636	12,140	13,270	1,627	88	24	64	1,597	277	222	777	321
Service wells.....do.....	1,387	1,081	1,444	(NA)	5	3	2	279	47	14	62	156
Footage drilled, total.....1,000 ft..	160,894	153,332	171,391	40,083	1,640	321	1,319	8,286	2,842	708	3,023	1,713
Oil wells.....do.....	81,270	82,366	103,363	32,786	559	179	380	3,265	1,137	367	1,329	432
Gas wells.....do.....	17,237	16,991	12,475	2,155	873	88	785	995	740	91	16	148
Dry holes.....do.....	60,371	52,339	53,483	5,142	202	54	154	3,578	893	226	1,580	879
Service wells.....do.....	2,016	1,636	2,070	(NA)	6							
Average footage drilled per well, all wells.....do.....	4,449	4,037	3,786	3,149	2,477	1,803	2,725	2,300	3,183	1,422	2,007	2,430
Oil wells.....do.....	4,364	3,862	3,766	3,170	1,644	1,444	1,759	2,389	3,167	1,932	2,017	2,734
Gas wells.....do.....	4,904	4,955	4,020	2,843	3,812	3,259	3,886	2,764	3,524	1,264	2,000	2,114
Dry holes.....do.....	4,778	4,311	4,030	3,160	2,295	2,000	2,333	1,606	1,532	1,714	1,581	1,628
Service wells.....do.....	1,453	1,513	1,434	(NA)	1,200							
Costs borne by contractors in drilling and equipping wells on contract, total <sup>2</sup> .....\$1,000..	672,098	655,207	715,820	98,752	7,248	1,025	6,223	25,093	8,216	2,561	9,007	5,309
Per well.....do.....	18.6	17.3	15.8	7.8	10.9	5.8	12.9	7.0	9.2	5.1	6.0	7.53
Per foot.....do.....\$1.00..	4.18	4.27	4.18	2.46	4.42	3.19	4.72	3.03	2.89	3.62	2.98	3.10
Oil wells.....do.....\$1,000..	340,350	348,810	437,499	81,261	1,128	349	779	10,411	3,797	1,101	4,221	1,298
Per well.....do.....	18.3	16.4	15.9	7.9	3.3	2.8	3.6	7.6	10.6	5.8	6.4	8.2
Per foot.....do.....\$1.00..	4.19	4.23	4.23	2.48	2.02	1.95	2.05	3.19	3.33	3.00	3.18	3.00
Gas wells.....do.....\$1,000..	81,239	85,944	55,887	4,520	5,087	413	4,674	3,182	1,872	373	61	876
Per well.....do.....	23.1	25.1	18.0	6.0	22.2	15.3	23.1	8.8	8.9	5.2	7.6	12.5
Per foot.....do.....\$1.00..	4.71	5.06	4.48	2.10	5.83	4.69	5.95	3.20	2.53	4.10	3.81	5.92
Dry holes.....do.....\$1,000..	243,753	215,214	216,337	12,971	1,026	4263	4770	10,270	2,408	1,005	4,437	2,420
Per well.....do.....	19.3	17.7	16.3	8.0	11.7	49.7	411.7	6.4	8.7	4.5	5.7	7.5
Per foot.....do.....\$1.00..	4.04	4.11	4.04	2.52	5.08	44.87	45.00	2.87	2.70	4.45	2.81	2.75
Service wells.....do.....\$1,000..	6,756	5,239	6,097	(NA)	7	(4)	(4)	1,230	145	82	288	715
Per well.....do.....	4.9	4.8	4.2	(NA)	1.4	(4)	(4)	4.4	3.1	5.9	4.6	4.6
Per foot.....do.....\$1.00..	3.35	3.20	2.95	(NA)	1.17	(4)	(4)	2.75	2.01	3.42	2.94	2.81
Cost, excluding payments to subcontractors and excluding cost of casing, tubing, and well equipment, total.....\$1,000..	599,054	627,369	689,037	95,604	6,609	924	5,685	23,174	7,753	2,185	8,706	4,530
Per well.....do.....	16.6	16.5	15.2	7.5	10.0	5.2	11.7	6.4	8.7	4.4	5.8	6.4
Per foot.....do.....\$1.00..	3.72	4.09	4.02	2.39	4.03	2.88	4.31	2.80	2.73	3.09	2.88	2.64
Oil wells.....do.....\$1,000..	301,584	333,392	420,353	78,512	1,061	289	772	9,695	3,537	903	4,138	1,117
Per well.....do.....	16.2	15.6	15.3	7.6	3.1	2.3	3.6	7.1	9.9	4.8	6.3	7.1
Per foot.....do.....\$1.00..	3.71	4.05	4.07	2.39	1.90	1.61	2.03	2.97	3.11	2.46	3.11	2.59
Gas wells.....do.....\$1,000..	71,912	82,663	53,066	4,290	4,546	390	4,156	2,968	1,800	356	59	753
Per well.....do.....	20.5	24.1	17.1	5.7	19.9	14.4	20.6	8.2	8.6	4.9	7.4	10.8
Per foot.....do.....\$1.00..	4.17	4.87	4.25	1.99	5.21	4.43	5.29	2.98	2.43	3.91	3.69	5.09
Dry holes.....do.....\$1,000..	219,670	206,242	209,690	12,802	995	4245	4757	9,564	2,271	879	4,228	2,186
Per well.....do.....	17.4	17.0	15.8	7.9	11.3	49.1	411.5	6.0	8.2	3.96	5.4	6.8
Per foot.....do.....\$1.00..	3.64	3.94	3.92	2.49	4.93	44.54	44.92	2.67	2.54	3.89	2.68	2.49
Service wells.....do.....\$1,000..	5,888	5,072	5,928	(NA)	7	(4)	(4)	947	145	47	281	474
Per well.....do.....	4.2	4.7	4.1	(NA)	1.4	(4)	(4)	3.4	3.1	3.4	4.5	3.0
Per foot.....do.....\$1.00..	2.92	3.10	2.86	(NA)	1.17	(4)	(4)	2.11	2.01	1.96	2.87	1.87
Amount paid or due subcontractors for drilling or equipping wells, total.....\$1,000..	54,543	23,480	19,469	(NA)	243	28	215	559	210	124	108	117
Oil wells.....do.....	27,509	12,869	11,448	(NA)	1	-	1	182	79	68	35	-
Gas wells.....do.....	5,908	2,203	1,846	(NA)	221	28	214	20	17	3	-	-
Dry holes.....do.....	20,845	8,270	6,035	(NA)	21							
Service wells.....do.....	281	138	140	(NA)	-	-	-	119	-	53	-	117
Payments to drilling subcontractors including day work and turnkey, total.....do.....	17,636	(NA)	(NA)	(NA)	-	-	-	436	170	78	75	113
Oil wells.....do.....	9,403	(NA)	(NA)	(NA)	-	-	-	136	69	49	18	-
Gas wells.....do.....	2,250	(NA)	(NA)	(NA)	-	-	-	7	7	-	-	-
Dry holes.....do.....	5,838	(NA)	(NA)	(NA)	-	-	-	180	94	29	57	-
Service wells.....do.....	145	(NA)	(NA)	(NA)	-	-	-	113	-	-	-	113
Payments to other subcontractors, total.....do.....	36,907	(NA)	(NA)	(NA)	243	28	215	123	40	46	33	4
Oil wells.....do.....	18,106	(NA)	(NA)	(NA)	1	-	1	46	10	19	17	-
Gas wells.....do.....	3,658	(NA)	(NA)	(NA)	221	28	214	13	10	3	-	-
Dry holes.....do.....	15,007	(NA)	(NA)	(NA)	21							
Service wells.....do.....	136	(NA)	(NA)	(NA)	-	-	-	6	-	24	-	4
Cost of casing, tubing, and well equipment, total <sup>3</sup> .....do.....	18,501	4,358	7,314	3,148	396	73	323	1,360	253	252	193	662
Oil wells.....do.....	11,237	2,549	5,698	2,749	66	60	6	534	175	130	48	181
Gas wells.....do.....	3,419	1,078	975	230	320	13	317	194	55	14	2	123
Dry holes.....do.....	3,238	702	612	169	10							
Service wells.....do.....	587	29	29	(NA)	-	-	-	164	-	108	136	358

See footnotes at end of table.

TABLE 6E. Drilling Statistics for Oil, Gas, Dry, and Service Wells as Reported by Drilling Contractors for 1963, 1958, 1954, and 1939, and by Geographic Areas: 1963--Continued

Item	West North Central					South Atlantic <sup>7</sup>	East South Central			
	Division	North Dakota	Nebraska	Kansas	Missouri and South Dakota <sup>6</sup>		Division	Kentucky	Mississippi	Tennessee and Alabama <sup>8</sup>
Wells, drilled, total <sup>1</sup> .....number..	3,640	115	303	3,133	89	950	2,238	1,364	773	1
Oil wells.....do.....	1,771	55	54	1,662	-	209	1,021	650	291	
Gas wells.....do.....	199	-	1	198	-	602	124	111	13	
Dry holes <sup>2</sup> .....do.....	1,467	56	247	1,149	15	95	1,004	515	468	
Service wells <sup>3</sup> .....do.....	203	4	1	124	74	44	89	88	1	
Footage drilled, total.....1,000 ft..	11,498	654	1,476	9,304	64	2,490	8,459	2,036	5,670	7
Oil wells.....do.....	5,433	322	275	5,480	-	574	3,987	813	2,544	6
Gas wells.....do.....	644	-	-	-	-	1,487	385	271	114	
Dry holes.....do.....	5,167	-	-	3,618	-	374	4,021	-	-	
Service wells.....do.....	254	332	1,201	206	64	55	66	952	3,012	
Average footage drilled per well, all wells.....	3,159	5,687	4,871	2,970	719	2,621	3,780	1,493	7,335	7,4
Oil wells.....	3,068	5,855	5,000	2,946	-	2,746	3,905	1,251	8,742	7,8
Gas wells.....	3,236	-	-	-	-	2,470	3,105	2,441	8,769	
Dry holes.....	3,522	-	-	3,149	-	3,937	4,005	-	6,422	5,8
Service wells.....	1,251	5,533	4,843	1,661	719	1,250	742	1,579	-	
Costs borne by contractors in drilling and equipping wells on contract, total <sup>4</sup> .....\$1,000..	31,885	2,726	3,612	25,184	363	11,529	33,859	6,384	22,024	5,4
Per well.....do.....	8.8	23.7	11.9	8.0	4.1	12.1	15.1	4.7	28.5	54
Per foot.....\$1.00..	2.77	4.17	2.45	2.70	5.67	4.63	4.00	3.14	3.88	7.7
Oil wells.....\$1,000..	14,798	1,460	972	14,276	-	1,879	17,736	2,541	10,158	5,0
Per well.....do.....	8.4	26.5	12.9	87.7	-	9.0	17.4	3.9	34.9	63
Per foot.....\$1.00..	2.72	4.53	2.59	2.60	-	3.27	4.45	3.13	3.99	8.0
Gas wells.....\$1,000..	1,650	-	(9)	(9)	-	7,534	1,393	923	470	
Per well.....do.....	8.3	-	(9)	(9)	-	12.5	11.2	8.3	36.2	
Per foot.....\$1.00..	2.56	-	(9)	(9)	-	5.07	3.62	3.41	4.12	
Dry holes.....\$1,000..	14,575	41,266	42,900	10,305	4363	1,693	14,436	42,920	41,396	4
Per well.....do.....	8.8	421.1	411.7	9.0	44.1	17.8	14.4	44.8	424.3	19
Per foot.....\$1.00..	2.82	43.81	42.41	2.85	45.67	4.53	3.59	43.07	43.78	3.0
Service wells.....\$1,000..	862	(4)	(4)	603	(4)	423	294	(4)	(4)	
Per well.....do.....	4.2	(4)	(4)	4.9	(4)	9.6	3.3	(4)	(4)	
Per foot.....\$1.00..	3.39	(4)	(4)	2.93	(4)	7.69	4.45	(4)	(4)	
Cost, excluding payments to subcontractors and excluding cost of casing, tubing, and well equipment, total.....\$1,000..	28,891	2,654	2,974	22,900	363	10,545	27,165	6,018	18,396	2,7
Per well.....do.....	7.9	23.1	9.8	7.3	4.1	11.1	12.1	4.4	13.8	27
Per foot.....\$1.00..	2.51	4.06	2.01	2.46	5.67	4.23	3.21	2.96	3.24	3.0
Oil wells.....\$1,000..	13,239	1,447	9541	12,786	-	1,637	13,192	2,360	8,161	2,6
Per well.....do.....	7.5	26.3	99.8	6.9	-	7.8	12.9	3.6	28.0	33
Per foot.....\$1.00..	2.44	4.49	1.97	2.33	-	2.85	3.31	2.90	3.21	4.0
Gas wells.....\$1,000..	1,535	-	(9)	(9)	-	6,870	1,122	765	357	
Per well.....do.....	7.7	-	(9)	(9)	-	11.4	9.0	6.9	27.5	
Per foot.....\$1.00..	2.38	-	(9)	(9)	-	4.62	2.91	2.82	3.13	
Dry holes.....\$1,000..	13,292	41,207	42,433	9,548	4363	1,615	12,557	42,893	49,878	
Per well.....do.....	9.1	420.1	49.8	8.3	44.1	17.0	12.5	44.8	421.1	3
Per foot.....\$1.00..	2.57	43.64	42.03	2.64	45.67	4.32	3.12	43.04	43.28	0.0
Service wells.....\$1,000..	825	(4)	(4)	566	(4)	423	294	(4)	(4)	
Per well.....do.....	4.1	(4)	(4)	4.6	(4)	9.6	3.3	(4)	(4)	
Per foot.....\$1.00..	3.25	(4)	(4)	2.75	(4)	7.69	4.45	(4)	(4)	
Amount paid or due subcontractors for drilling or equipping wells, total.....\$1,000..	2,358	68	416	1,874	-	95	3,137	136	1,844	1,1
Oil wells.....do.....	1,144	-	-	-	-	13	1,870	98	919	8
Gas wells.....do.....	108	13	113	1,126	-	42	51	11	40	
Dry holes.....do.....	1,069	55	303	711	-	40	1,216	27	885	3
Service wells.....do.....	37	-	-	37	-	-	-	-	-	
Payments to drilling subcontractors including day work and turnkey, total.....do.....	848	44	-	804	-	67	1,989	76	978	9
Oil wells.....do.....	397	9	-	424	-	9	1,265	50	560	6
Gas wells.....do.....	36	-	-	-	-	32	40	-	40	
Dry holes.....do.....	388	35	-	353	-	26	684	26	378	2
Service wells.....do.....	27	-	-	27	-	-	-	-	-	
Payments to other subcontractors, total.....do.....	1,510	24	416	1,070	-	28	1,148	60	866	2
Oil wells.....do.....	747	-	-	-	-	4	605	48	359	1
Gas wells.....do.....	72	4	113	702	-	10	11	-	-	
Dry holes.....do.....	681	20	303	358	-	14	532	1	507	
Service wells.....do.....	10	-	-	10	-	-	-	-	-	
Cost of casing, tubing, and well equipment, total <sup>5</sup> .....do.....	636	4	222	410	-	889	3,557	230	1,784	1,5
Oil wells.....do.....	415	-	58	364	-	229	2,674	83	1,078	1,5
Gas wells.....do.....	7	-	-	-	-	622	220	147	73	
Dry holes.....do.....	214	4	164	46	-	38	663	-	633	
Service wells.....do.....	-	-	-	-	-	-	-	-	-	

See footnotes at end of table.

TABLE 6E. Drilling Statistics for Oil, Gas, Dry, and Service Wells as Reported by Drilling Contractors for 1963, 1958, 1954, and 1939, and by Geographic Areas: 1963--Continued

Item	West South Central					Mountain						Pacific		
	Division	Arkansas	Louisiana	Oklahoma	Texas	Division	Montana	Wyoming	Colorado	New Mexico	Utah and Nevada <sup>10</sup>	Division	California	Washington and Alaska <sup>11</sup>
Wells, drilled, total <sup>1</sup> .....number..	19,939	510	4,596	3,490	11,343	2,934	371	850	446	1,029	238	2,197	2,158	39
Oil wells.....do.....	11,017	316	2,419	2,058	6,224	1,332	203	325	82	619	103	1,568	1,560	8
Gas wells.....do.....	1,547	35	460	235	817	300	6	36	60	132	66	154	153	1
Dry holes.....do.....	6,738	154	1,675	1,043	3,866	1,208	160	420	302	258	68	439	409	30
Service wells <sup>2</sup> .....do.....	637	5	42	154	436	94	2	69	2	20	1	36	36	-
Footage drilled, total.....1,000 ft..	104,460	1,625	32,833	13,997	56,005	15,407	1,985	4,100	2,189	5,723	1,410	8,654	8,319	335
Oil wells.....do.....	54,925	993	16,376	7,701	29,855	7,363	1,184	1,586	2,404	3,553	636	5,164	5,080	84
Gas wells.....do.....	10,283	139	3,539	1,198	5,407	1,660		237	1315	685	435	910		
Dry holes.....do.....	38,297			4,680	20,292	6,257		2,193	1,470			2,475	3,134	251
Service wells.....do.....	955	493	12,918	418	451	127	801	84	1,485		339	105	105	-
Average footage drilled per well, all wells.....do.....	5,239	3,186	7,144	4,011	4,937	5,251	5,350	4,824	4,908	5,562	5,924	3,985	3,855	9,669
Oil wells.....do.....	4,985	3,142	6,770	3,742	4,797	5,528	5,833	4,880	4,927	5,749	6,175	3,357	3,256	10,500
Gas wells.....do.....	6,647	3,971	7,693	5,098	6,618	5,533		6,583	5,081	5,189	6,591	5,909		
Dry holes.....do.....	5,684			4,487	5,249	5,180		5,221	4,868			5,638		
Service wells.....do.....	1,499	3,101	7,523	2,714	1,034	1,351		1,217	( <sup>12</sup> )	5,342	4,913	2,917	2,917	-
Costs borne by contractors in drilling and equipping wells on contract, total <sup>3</sup> .....\$1,000..	453,941	5,819	181,325	55,078	211,719	70,586	9,320	18,169	5,852	29,641	7,604	37,957	34,137	3,820
Per well.....do.....	22.8	11.4	39.5	15.8	18.7	24.1	25.1	21.4	13.1	28.8	31.9	17.3	15.8	97.9
Per foot.....\$1.00..	4.35	3.58	5.52	3.93	3.78	4.58	4.70	4.43	2.67	5.18	5.39	4.39	4.10	11.40
Oil wells.....\$1,000..	238,540	3,220	92,954	30,500	111,866	35,343	5,144	7,356	1,082	18,480	3,281	20,515	19,857	658
Per well.....do.....	21.7	10.2	38.4	14.8	18.0	26.5	25.3	22.6	13.2	29.9	31.9	13.1	12.7	82.2
Per foot.....\$1.00..	4.34	3.24	5.68	3.96	3.75	4.80	4.34	4.64	2.68	5.20	5.16	3.97	3.91	7.83
Gas wells.....\$1,000..	51,007	999	21,833	5,460	22,715	7,940	( <sup>13</sup> )	1,310	12,108	2,963	2,326	3,446	( <sup>14</sup> )	( <sup>14</sup> )
Per well.....do.....	33.0	28.5	47.5	23.2	27.8	26.5	( <sup>13</sup> )	36.4	12,174	22.4	35.2	22.4	( <sup>14</sup> )	( <sup>14</sup> )
Per foot.....\$1.00..	4.96	7.19	6.17	4.56	4.20	4.78	( <sup>13</sup> )	5.53	12,343	4.33	5.35	3.79	( <sup>14</sup> )	( <sup>14</sup> )
Dry holes.....\$1,000..	161,328	41,600	466,538	18,320	75,657	26,879	13,176	9,214	3,690	48,198	41,997	13,546	14,830	143,162
Per well.....do.....	23.9	10.1	38.8	17.6	19.6	22.3	13,24.9	21.9	12.2	42.9	30.9	12.4	12.6	143,162
Per foot.....\$1.00..	4.21	3.25	45.15	3.91	3.73	4.30	13,5.21	4.20	2.51	45.52	45.89	5.47	14,4.41	14,12.60
Service wells.....\$1,000..	3,066	( <sup>4</sup> )	( <sup>4</sup> )	798	1,481	424	( <sup>13</sup> )	289	( <sup>12</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	450	450	-
Per well.....do.....	4.8	( <sup>4</sup> )	( <sup>4</sup> )	5.2	3.4	4.5	( <sup>13</sup> )	4.2	( <sup>12</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	12.5	12.5	-
Per foot.....\$1.00..	3.21	( <sup>4</sup> )	( <sup>4</sup> )	1.91	3.28	3.34	( <sup>13</sup> )	3.44	( <sup>12</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	4.29	4.29	-
Cost, excluding payments to subcontractors and excluding cost of casing, tubing, and well equipment, total.....\$1,000..	405,119	4,722	162,567	48,321	189,509	61,756	7,062	16,569	5,218	26,929	5,978	35,795	32,224	3,571
Per well.....do.....	20.3	9.3	35.4	13.8	16.7	21.0	19.0	19.5	11.7	26.2	25.1	16.3	14.9	91.6
Per foot.....\$1.00..	3.88	2.91	4.95	3.45	3.38	4.01	3.56	4.04	2.38	4.71	4.24	4.14	3.87	10.66
Oil wells.....\$1,000..	213,252	2,596	83,821	25,668	101,167	30,566	3,980	6,382	973	16,841	2,390	18,942	18,378	564
Per well.....do.....	19.4	8.2	34.7	12.5	16.3	22.9	19.6	19.6	11.9	27.2	23.2	12.1	11.8	70.5
Per foot.....\$1.00..	3.88	2.61	5.12	3.33	3.39	4.15	3.36	4.02	2.41	4.74	3.76	3.67	3.62	6.71
Gas wells.....\$1,000..	44,589	747	20,008	4,353	19,481	6,995	( <sup>13</sup> )	1,291	12,987	2,855	1,615	3,287	( <sup>14</sup> )	( <sup>14</sup> )
Per well.....do.....	28.8	21.3	43.5	18.5	23.8	23.3	( <sup>13</sup> )	35.9	12,15.9	21.6	24.5	21.3	( <sup>14</sup> )	( <sup>14</sup> )
Per foot.....\$1.00..	4.34	5.37	5.65	3.63	3.60	4.21	( <sup>13</sup> )	5.45	12,3.13	4.17	3.71	3.61	( <sup>14</sup> )	( <sup>14</sup> )
Dry holes.....\$1,000..	144,755	41,379	458,738	17,614	67,775	23,771	13,3082	8,607	3,258	47,233	41,973	13,121	14,3401	143,007
Per well.....do.....	21.5	8.7	34.2	16.9	17.5	19.7	13,18.3	20.5	10.8	42.6	28.6	12.4	12.6	143,007
Per foot.....\$1.00..	3.78	4.20	44.55	3.76	3.34	3.80	13,3.85	3.92	2.22	44.87	45.82	5.3	14,4.28	14,11.98
Service wells.....\$1,000..	2,523	( <sup>4</sup> )	( <sup>4</sup> )	686	1,086	424	( <sup>13</sup> )	289	( <sup>12</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	445	445	-
Per well.....do.....	4.0	( <sup>4</sup> )	( <sup>4</sup> )	4.5	2.5	4.5	( <sup>13</sup> )	4.2	( <sup>12</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	12.4	12.4	-
Per foot.....\$1.00..	2.64	( <sup>4</sup> )	( <sup>4</sup> )	1.64	2.41	3.34	( <sup>13</sup> )	3.44	( <sup>12</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	4.24	4.24	-
Amount paid or due subcontractors for drilling or equipping wells, total.....\$1,000..	38,691	240	16,360	4,475	17,616	7,874	153,769	1,286	355	2,464	( <sup>15</sup> )	1,586	1,337	249
Oil wells.....do.....	19,079	66	7,545	3,522	7,946	4,178	151,965	728	32	1,453	( <sup>15</sup> )	1,042	948	94
Gas wells.....do.....	4,482		1,414	2,607	848	151,714		18	16	100	( <sup>15</sup> )	136	136	-
Dry holes.....do.....	15,010	174	7,386	917	6,994	2,848	151,090	540	307	911	( <sup>15</sup> )	403	248	155
Service wells.....do.....	120		15	36	69	-	-	-	-	-	-	5	5	-
Payments to drilling subcontractors including day work and turnkey, total.....do.....	9,032	29	1,515	2,296	5,192	4,820	153,445	180	69	1,126	( <sup>15</sup> )	444	444	-
Oil wells.....do.....	4,651	29	916	2,022	1,684	2,514	151,753	145	-	616	( <sup>15</sup> )	431	431	-
Gas wells.....do.....	1,417	-	99	143	1,175	715	151,714	1	-	-	( <sup>15</sup> )	3	3	-
Dry holes.....do.....	2,959	-	500	126	2,333	1,591	159,978	34	69	510	( <sup>15</sup> )	10	10	-
Service wells.....do.....	5	-	-	5	-	-	-	-	-	-	-	-	-	-
Payments to other subcontractors, total.....do.....	29,659	211	14,845	2,179	12,424	3,054	153,324	1,106	286	1,338	( <sup>15</sup> )	1,142	893	249
Oil wells.....do.....	14,428	37	6,629	1,500	6,262	1,664	151,212	583	32	837	( <sup>15</sup> )	611	517	94
Gas wells.....do.....	3,065		1,315	1,432	133			17	16	100	-	133	133	-
Dry holes.....do.....	12,051	174	6,886	648	4,661	1,257	112	506	238	401	-	393	238	155
Service wells.....do.....	115	-	15	31	69	-	-	-	-	-	-	5	5	-
Cost of casing, tubing, and well equipment, total <sup>3</sup> .....do.....	10,131	857	2,398	2,282	4,594	956	151,115	314	279	248	( <sup>15</sup> )	576	576	-
Oil wells.....do.....	6,209	558	1,588	1,310	2,753	599	1590	246	77	186	( <sup>15</sup> )	531	531	-
Gas wells.....do.....	1,936	299	411	896	627	97	1511	1	77	8	( <sup>15</sup> )	23	23	-
Dry holes.....do.....	1,563		378	888	260		1514	67	125	54	( <sup>15</sup> )	22	22	-
Service wells.....do.....	423	-	21	76	326	-	-	-	-	-	-	-	-	-

Footnotes on next page.

**TABLE 6E. Drilling Statistics for Oil, Gas, Dry, and Service Wells as Reported by Drilling Contractors for 1963, 1958, 1954, and 1939, and by Geographic Areas: 1963--Continued**

Footnotes for Table 6E.-13D.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Represents wells drilled which were completed during the year, and includes wells completed during the year, although begun in the previous year.

<sup>2</sup>Dry holes represent wells drilled and abandoned without commercial production during the year, even if converted to service wells. Service wells include gas-injection, water-injection, and brine-disposal wells, but exclude converted wells.

<sup>3</sup>Respondents were asked to include the cost of labor, supplies, water, fuel, and power used in such operations as erecting and dismantling drilling rig and derrick, drilling hole, running and cementing casing, and hauling materials (including machinery and tool charges) insofar as such services were provided by the contractor who drilled the well. Respondents were asked to exclude such items as taxes, interest on investments, and overhead costs. The figures exclude payments made directly to other than drilling contractors by operators of oil and gas field properties.

<sup>4</sup>Figure for service wells is included with that for dry holes.

<sup>5</sup>Includes the cost of delivering and installing equipment. Excludes the value of equipment that was salvaged and used again but includes the cost of salvaging.

<sup>6</sup>Only 6 dry holes were reported drilled by contractors classified in South Dakota.

<sup>7</sup>Represents West Virginia; 1 oil well drilled by contractors classified in Virginia; and 3 oil wells, 3 dry holes, and 2 service wells reported drilled by contractors classified in Florida.

<sup>8</sup>Only 3 oil wells and 6 dry holes were reported drilled by contractors classified in Tennessee.

<sup>9</sup>Figure for gas wells is included with that for oil wells.

<sup>10</sup>Only 3 oil wells and 5 dry holes were reported drilled by contractors classified in Nevada.

<sup>11</sup>Only 7 dry holes were reported drilled by contractors classified in Washington.

<sup>12</sup>Figure for service wells is included with that for gas wells.

<sup>13</sup>Figures for gas wells and service wells are included with those for dry holes.

<sup>14</sup>Figure for gas wells is included with that for dry holes.

<sup>15</sup>Figures for Utah and Nevada are included with that for Montana.



TABLE 7A. Supplies Used in the Industries, by Geographic Areas and Type of Operation: 1963

Geographic area and type of operation	Total cost of supplies used  (\$1,000)	Steel mill shapes and forms <sup>1</sup>		Cost of other supplies <sup>2</sup>  (\$1,000)	Cost of supplies undistributed by type  (\$1,000)
		Quantity  (short tons)	Cost  (\$1,000)		
1381.—DRILLING OIL AND GAS WELLS					
<u>Geographic Area</u>					
United States.....	229,469	75,474	20,801	158,379	50,289
Middle Atlantic Division.....	2,781	1,697	407	1,754	620
East North Central Division.....	9,047	3,624	814	4,916	3,317
Ohio.....	2,874	1,939	441	1,709	724
Illinois.....	3,643	818	201	1,778	1,664
West North Central Division.....	9,088	4,443	1,213	6,339	1,536
Nebraska.....	1,133	594	129	939	65
Kansas.....	7,143	3,747	1,062	4,706	1,375
South Atlantic Division.....	4,036	2,990	625	2,263	1,148
East South Central Division.....	13,775	17,253	4,080	6,964	2,731
Mississippi.....	7,970	10,219	2,327	4,262	1,381
West South Central Division.....	155,423	38,586	11,877	107,338	36,208
Louisiana, total.....	54,400	11,968	5,552	41,451	7,397
North Louisiana.....	7,273	5,150	1,440	3,655	2,178
South Louisiana.....	47,127	6,818	4,112	37,796	5,219
Texas.....	75,948	19,635	4,622	44,960	26,366
Texas Gulf Coast A.....	9,037	2,586	610	3,655	4,772
Texas Gulf Coast B.....	3,953	1,938	433	2,014	1,506
South Texas.....	8,451	3,260	756	4,689	3,006
North Central Texas A.....	5,367	375	183	2,898	2,286
East Texas A.....	4,260	973	194	1,850	2,216
East Texas B.....	3,348	320	79	1,551	1,718
West Texas A.....	26,013	4,669	1,331	19,703	4,979
West Texas B.....	4,071	1,943	435	3,221	415
Texas Panhandle.....	6,619	3,076	507	2,602	3,510
Mountain Division.....	25,219	5,904	1,561	20,295	3,363
Montana.....	3,485	286	70	2,802	613
Wyoming.....	6,947	2,597	636	5,542	769
Colorado.....	1,733	1,171	225	854	654
New Mexico.....	11,664	1,170	475	9,940	1,249
Pacific Division.....	10,100	977	224	8,510	1,366
<u>Principal Type of Service Performed</u>					
All establishments.....	229,469	75,474	20,801	158,379	50,289
Drilling oil and gas wells.....	212,831	72,511	20,108	148,699	44,024
With well operations.....	41,859	30,761	9,021	28,716	4,122
Without well operations.....	170,972	41,750	11,087	119,983	39,902
Drilling in, spudding in, tailing in, and reworking wells.....	16,638	2,963	693	9,680	6,265
With well operations.....	1,610	224	54	1,204	352
Without well operations.....	15,028	2,739	639	8,476	5,913
1382.—OIL AND GAS EXPLORATION SERVICES					
<u>Geographic Area</u>					
United States.....	15,482	979	866	8,934	5,682
West South Central.....	9,085	312	546	5,058	3,481
Texas.....	6,423	51	26	3,504	2,893
Mountain.....	2,061	52	83	1,367	611
Pacific.....	2,276	475	215	1,892	169
<u>Principal Type of Service Performed</u>					
All establishments.....	15,482	979	866	8,934	5,682
Geophysical exploration.....	13,865	774	735	7,765	5,365
Other exploration.....	1,617	205	131	1,169	317
1389.—OIL AND GAS FIELD SERVICES, N.E.C.					
<u>Geographic Area</u>					
United States.....	140,962	6,827	1,865	74,671	64,426
North Central.....	5,541	142	41	4,155	1,345
West South Central.....	124,121	5,122	1,372	65,193	57,556
Oklahoma.....	4,517	1,018	187	2,065	2,265

See footnotes at end of table.

TABLE 7A. Supplies Used in the Industries, by Geographic Areas and Type of Operation: 1963—Continued

Geographic area, and type of operation	Steel mill shapes and forms <sup>1</sup>				
	Total cost of supplies used	Quantity	Cost	Cost of other supplies <sup>2</sup>	Cost of supplies undistributed by type
	(\$1,000)	(short tons)	(\$1,000)	(\$1,000)	(\$1,000)
1389.—OIL AND GAS FIELD SERVICES, N.E.C.—Continued					
<u>Geographic Area--Continued</u>					
West South Central—Continued					
Texas.....	67,981	3,789	1,048	29,825	37,108
Texas Gulf Coast A.....	6,967	1,008	277	4,858	1,832
South Texas.....	1,797	899	231	449	1,117
East Texas B.....	1,938	165	54	862	1,022
West Texas A.....	47,284	812	229	17,123	29,932
Texas Panhandle.....	1,838	217	95	614	1,129
Mountain.....	4,115	786	215	1,681	2,219
New Mexico.....	2,027	483	125	912	990
East New Mexico.....	1,630	483	125	866	639
Pacific.....	5,132	665	208	2,936	1,988
<u>Principal Type of Service Performed</u>					
All establishments.....	140,962	6,827	1,865	74,671	64,426
Well surveying, well logging, and cementing wells.....	<sup>3</sup> 62,918	27	33	<sup>3</sup> 60,399	2,486
Building (erecting), repairing, and dismantling rigs and derricks.....	867	117	51	172	644
Excavating slush pits and cellars.....	966	59	15	467	484
Running, cutting, and pulling casing, tubes, and rods.....	9,228	460	148	6,950	2,130
Perforating well casing.....	4,051	1,051	307	637	3,107
Acidizing and other chemical treatment of wells.....	36,747	463	118	6,887	29,742
Cleaning out, bailing out, and swabbing wells.....	2,581	749	120	1,485	976
Installing production equipment, such as well head fittings, pumps, and engines.....	1,646	105	21	977	648
Erecting, cleaning, repairing, and dismantling lease tanks.....	545	353	90	86	369
Pumping wells, but not operating leases.....	760	—	—	79	681
Other oil and gas field services, n.e.c.....	<sup>3</sup> 53,846	3,443	962	<sup>3</sup> 29,725	23,159

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Represents such items as casing, tubing, pipe, plates, sheets, piling, drill steel bars, wire, and structural shapes.<sup>2</sup>Includes gas purchased for gas lift and repressuring, amounting to 310 million cubic feet, costing \$40 thousand.<sup>3</sup>Includes products purchased for resale without further processing.

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954

Geographic area and type of operation	Aggregate horsepower per production, development, and exploration worker		Aggregate horsepower (prime movers and electric motors driven by purchased energy)  (1,000 horsepower)	1963						
	1963	1954		Prime movers (1,000 horsepower)				Electric motors (1,000 horsepower)		
				Total	Highway type	All other equipment		Total	Driven by purchased energy	Driven by energy generated at same establishment
						Driving generators	Not driving generators			
INDUSTRY 1381.—DRILLING OIL AND GAS WELLS										
<u>Geographic Area</u>										
United States, total.....	104	69	5,253	5,174	1,516	449	3,209	299	79	220
Middle Atlantic.....	104	70	64	63	21	2	40	1	1	(2)
Pennsylvania.....	105	69	56	55	18	2	35	1	1	(2)
East North Central.....	83	50	236	232	86	3	143	5	4	1
Ohio.....	96	43	73	72	27	2	43	1	1	(2)
Illinois.....	75	48	88	86	31	1	54	3	2	(2)
Michigan.....	77	71	44	44	14	(2)	30	(2)	(2)	(2)
West North Central.....	98	58	238	233	92	26	115	8	5	3
Nebraska.....	102	67	20	20	9	1	10	1	(2)	(2)
Kansas.....	99	56	199	194	77	24	93	8	5	3
South Atlantic.....	98	53	97	95	36	1	58	3	2	1
West Virginia.....	97	52	94	92	34	1	57	2	2	(2)
East South Central.....	91	64	228	225	63	12	150	3	3	(2)
Kentucky.....	97	59	74	72	23	(2)	49	2	2	(2)
Alabama.....	73	(NA)	17	17	5	(2)	12	(2)	(2)	(2)
Mississippi.....	91	70	136	135	35	12	88	1	1	(2)
West South Central, total.....	107	71	3,589	3,529	986	362	2,181	259	60	199
Arkansas.....	88	60	44	43	17	1	25	1	1	(2)
Louisiana, total.....	119	68	1,282	1,275	196	234	845	175	7	168
North Louisiana.....	96	(NA)	175	172	68	7	97	3	3	(2)
South Louisiana.....	125	(NA)	1,107	1,103	128	227	748	172	4	168
Oklahoma.....	113	65	578	557	205	31	321	27	21	6
Texas, total.....	99	75	1,685	1,654	568	96	990	57	31	26
Texas Gulf Coast A.....	90	(NA)	229	227	78	9	140	8	2	6
Texas Gulf Coast B.....	113	(NA)	106	106	34	3	69	1	(2)	1
South Texas.....	116	(NA)	232	229	69	6	154	4	3	1
Southwest Texas.....	72	(NA)	40	39	14	1	24	1	1	(2)
North Central Texas A.....	101	(NA)	152	150	51	4	95	3	2	1
North Central Texas B.....	80	(NA)	68	67	29	5	33	1	1	(2)
East Texas A.....	150	(NA)	130	119	51	1	67	11	11	(2)
East Texas B.....	126	(NA)	107	106	23	14	69	5	1	4
West Texas A.....	89	(NA)	442	436	136	50	250	19	6	13
West Texas B.....	132	(NA)	107	106	39	3	64	1	1	(2)
Texas Panhandle.....	73	(NA)	72	69	44	(2)	25	3	3	(2)
Mountain.....	101	66	481	478	160	20	298	6	3	3
Montana.....	95	63	63	62	17	1	44	1	1	(2)
Wyoming.....	118	78	138	138	58	6	74	1	(2)	(2)
Colorado.....	110	48	45	44	20	2	22	1	1	(2)
New Mexico.....	91	71	191	189	51	10	128	4	1	3
Pacific.....	118	77	321	319	72	23	224	13	2	11
California.....	111	(NA)	283	281	67	20	194	12	2	10
<u>Principal Type of Service Performed</u>										
All establishments.....	104	69	5,253	5,174	1,516	449	3,209	299	79	220
Drilling oil and gas wells.....	106	(NA)	4,373	4,312	1,113	428	2,771	277	61	216
With well operations.....	109	(NA)	821	791	317	46	428	45	30	15
Without well operations.....	107	(NA)	3,552	3,521	796	382	2,343	232	31	201
Drilling in, spudding in, and tailing in.....	106	(NA)	197	193	95	5	93	5	4	1
With well operations.....	101	(NA)	26	24	11	2	11	2	2	(2)
Without well operations.....	106	(NA)	171	169	84	3	82	3	2	1
Reworking wells.....	89	(NA)	683	669	308	16	345	18	14	4
With well operations.....	118	(NA)	44	43	25	(2)	18	1	1	(2)
Without well operations.....	88	(NA)	639	626	283	16	327	17	13	4
INDUSTRY 1382.—OIL AND GAS EXPLORATION SERVICES										
<u>Geographic Area</u>										
United States.....	121	93	877	874	787	39	48	34	3	31
West South Central.....	126	(NA)	662	659	640	7	12	3	3	(2)
Louisiana.....	60	318	84	83	81	(2)	2	1	1	-
South Louisiana.....	59	(NA)	81	80	78	(2)	2	1	1	-
Oklahoma.....	249	50	127	126	123	1	2	1	1	-
Texas.....	135	65	449	448	435	6	7	1	1	(2)
Texas Gulf Coast A.....	150	(NA)	142	142	141	-	1	(2)	(2)	(2)
East Texas A.....	97	(NA)	108	108	104	3	1	(2)	(2)	-
West Texas A.....	166	(NA)	85	85	82	1	2	(2)	(2)	-

See footnotes at end of table.

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954—Continued

Geographic area and type of operation	Aggregate horsepower per production, development, and exploration worker		Aggregate horsepower (prime movers and electric motors driven by purchased energy) (1,000 horsepower)	1963						
	1963	1954		Prime movers (1,000 horsepower)				Electric motors (1,000 horsepower)		
				Total	Highway type	All other equipment		Total	Driven by purchased energy	Driven by energy generated at same establishment
						Driving generators	Not driving generators			
INDUSTRY 1382.--OIL AND GAS EXPLORATION SERVICES--Continued										
<u>Geographic Area--Continued</u>										
Mountain.....	130	(NA)	66	66	51	-	15	1	(Z)	1
Pacific.....	84	(NA)	71	71	27	26	18	30	(Z)	30
California.....	86	163	49	49	14	19	16	22	(Z)	22
<u>Principal Type of Service Performed</u>										
All establishments.....	121	93	877	874	787	39	48	34	3	31
Geophysical exploration.....	119	94	816	813	743	32	38	27	3	24
Other exploration.....	167	90	61	61	44	7	10	7	-	7
INDUSTRY 1389.—OIL AND GAS FIELD SERVICES, N.E.C.										
<u>Geographic Area</u>										
United States.....	104	72	4,057	4,015	3,193	41	781	48	42	6
North Central.....	86	(NA)	283	279	222	7	50	5	4	1
South Atlantic and East South Central.....	76	(NA)	79	78	66	-	12	1	1	-
Mississippi.....	88	(NA)	38	38	31	-	7	(Z)	(Z)	-
West South Central.....	108	(NA)	3,184	3,149	2,491	30	628	40	35	5
Louisiana, total.....	96	(NA)	804	798	541	11	246	9	6	3
North Louisiana.....	87	(NA)	45	45	35	-	10	5	(Z)	3
South Louisiana.....	97	(NA)	759	753	506	11	236	6	6	(Z)
Oklahoma.....	90	56	277	275	230	6	39	2	2	(Z)
Texas.....	117	84	2,079	2,052	1,698	13	341	29	27	2
Texas Gulf Coast A.....	93	(NA)	181	180	165	2	13	1	1	-
South Texas.....	92	(NA)	71	71	61	2	8	(Z)	(Z)	-
North Central Texas A.....	90	(NA)	71	70	56	-	14	2	1	1
North Central Texas B.....	82	(NA)	38	38	29	2	7	(Z)	(Z)	(Z)
East Texas A.....	52	(NA)	19	19	15	(Z)	4	(Z)	(Z)	-
East Texas B.....	146	(NA)	164	158	105	4	46	7	6	1
West Texas A.....	128	(NA)	1,350	1,333	1,122	3	208	17	17	(Z)
Texas Panhandle.....	97	(NA)	81	81	64	(Z)	17	(Z)	(Z)	(Z)
<u>Principal Type of Service Performed</u>										
All establishments.....	104	72	4,057	4,015	3,193	41	781	48	42	6
Well surveying, well logging, and cementing wells....	138	129	1,138	1,126	916	-	210	12	12	-
Building (erecting), repairing, and dismantling rigs and derricks.....	71	25	46	45	31	-	14	1	1	(Z)
Excavating slush pits and cellars.....	211	109	109	104	76	-	28	5	5	-
Running, cutting, and pulling casing, tubes, and rods.	88	63	467	464	383	10	71	5	3	2
Perforating well casing.....	176	23	152	151	143	1	7	1	1	-
Acidizing and other chemical treatment of wells.....	147	198	407	404	236	4	164	3	3	-
Cleaning out, bailing out, and swabbing wells.....	91	65	219	218	164	10	44	1	1	(Z)
Installing production equipment, such as well-head fittings, pumps, and engines.....	82	39	154	153	127	2	24	1	1	(Z)
Erecting, cleaning, repairing and dismantling lease tanks.....	78	48	36	36	32	-	4	(Z)	(Z)	-
Pumping wells, but not operating leases.....	176	47	84	83	65	-	18	1	1	-
Other oil and gas field services, n.e.c.....	81		1,249	1,235	1,020	14	201	18	14	4

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

(Z) Less than one-half of the unit of measure specified.

n.e.c. Not elsewhere classified.

1Represents geophysical exploration work only.

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with an average of—						
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
GROUP 138.—OIL AND GAS FIELD SERVICES INDUSTRIES								
Establishments, total.....number..	6,212	5,800	265	114	20	8	3	2
Reporting water use, total.....do....	2,837	2,450	246	109	19	8	3	2
By source of water:								
Utility.....do....	570	487	55	20	5	1	1	1
Other than utility.....do....	1,838	1,561	177	80	10	7	2	1
Source not specified.....do....	429	402	14	9	4	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	2,534	2,268	196	56	9	3	1	1
1 to 9 million gallons.....do....	214	150	29	29	3	2	1	-
10 to 19 million gallons.....do....	32	12	9	6	4	1	-	-
20 to 99 million gallons.....do....	41	12	11	14	2	1	1	-
100 million gallons and over.....do....	16	8	1	4	1	1	-	1
Employees.....do....	112,373	51,995	17,942	16,483	6,653	5,619	13,092	(D)
At establishments reporting water use.....do....	97,891	40,182	16,812	22,186	(D)	5,619	13,092	(D)
Value added in mining.....\$1,000..	1,241,354	527,474	186,588	182,255	102,301	68,288	174,448	(D)
Value added at establishments reporting water use.....do....	999,597	302,266	175,586	279,009	(D)	68,288	174,448	(D)
Industry 1381.—Drilling Oil and Gas Wells								
Establishments, total.....number..	2,836	2,573	177	72	11	3	-	-
Reporting water use, total.....do....	1,467	1,221	165	68	10	3	-	-
By source of water:								
Utility.....do....	178	143	30	4	1	-	-	-
Other than utility.....do....	1,113	914	128	61	7	3	-	-
Source not specified.....do....	176	164	7	3	2	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	1,217	1,067	119	27	4	-	-	-
1 to 9 million gallons.....do....	174	129	26	18	1	-	-	-
10 to 19 million gallons.....do....	27	10	8	6	2	1	-	-
20 to 99 million gallons.....do....	38	11	11	13	2	1	-	-
100 million gallons and over.....do....	11	4	1	4	1	1	-	-
Employees.....do....	155,416	26,852	12,077	10,314	3,601	2,158	-	-
At establishments reporting water use.....do....	47,822	21,147	11,332	13,185	(D)	2,158	-	-
Value added in mining.....\$1,000..	653,337	294,338	142,686	129,777	58,097	28,439	-	-
Value added at establishments reporting water use.....do....	586,946	240,711	134,963	182,833	(D)	28,439	-	-
Industry 1382.—Oil and Gas Field Exploration Services								
Establishments, total.....number..	373	338	13	16	4	2	-	-
Reporting water use, total.....do....	150	116	12	16	4	2	-	-
By source of water:								
Utility.....do....	39	25	4	8	2	-	-	-
Other than utility.....do....	88	71	8	6	1	2	-	-
Source not specified.....do....	23	20	-	2	1	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	134	110	10	10	3	1	-	-
1 to 9 million gallons.....do....	14	5	1	6	1	1	-	-
10 to 19 million gallons.....do....	1	-	1	-	-	-	-	-
20 to 99 million gallons.....do....	-	-	-	-	-	-	-	-
100 million gallons and over.....do....	1	1	-	-	-	-	-	-
Employees.....do....	18,683	2,124	815	2,489	3,080	(D)	-	-
At establishments reporting water use.....do....	8,011	2,442	(D)	2,489	3,080	(D)	-	-
Value added in mining.....\$1,000..	89,988	22,718	6,632	22,272	38,366	(D)	-	-
Value added at establishments reporting water use.....do....	83,853	23,215	(D)	22,272	38,366	(D)	-	-
Industry 1389.—Oil and Gas Field Services, N.E.C.								
Establishments, total.....number..	3,003	2,889	75	26	5	3	3	2
Reporting water use, total.....do....	1,220	1,113	69	25	5	3	3	2
By source of water:								
Utility.....do....	353	319	21	8	2	1	1	1
Other than utility.....do....	637	576	41	13	2	2	2	1
Source not specified.....do....	230	218	7	4	1	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	1,183	1,091	67	19	2	2	1	1
1 to 9 million gallons.....do....	26	16	2	5	1	1	1	-
10 to 19 million gallons.....do....	4	2	-	-	2	-	-	-
20 to 99 million gallons.....do....	3	1	-	1	-	-	1	-
100 million gallons and over.....do....	4	3	-	-	-	-	-	1
Employees.....do....	48,274	23,019	5,050	3,680	3,433	(D)	13,092	(D)
At establishments reporting water use.....do....	42,058	25,533	(D)	(D)	3,433	(D)	13,092	(D)
Value added in mining.....\$1,000..	498,029	210,418	37,270	30,206	45,687	(D)	174,448	(D)
Value added at establishments reporting water use.....do....	328,798	108,663	(D)	(D)	45,687	(D)	174,448	(D)

See footnotes at end of table.

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963—Continued

Item	Establishments, total	Establishments with an average of—						
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
Survey, Log, Cement Services Subindustry								
Establishments, total.....number..	268	259	3	3	-	1	-	2
Reporting water use, total.....do....	117	110	1	3	-	1	-	2
By source of water:								
Utility.....do....	59	56	-	1	-	1	-	1
Other than utility.....do....	38	36	-	1	-	-	-	1
Source not specified.....do....	20	18	1	1	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	113	108	1	2	-	1	-	1
1 to 9 million gallons.....do....	3	2	2	1	-	-	-	-
10 to 19 million gallons.....do....	-	-	-	-	-	-	-	-
20 to 99 million gallons.....do....	-	-	-	-	-	-	-	-
100 million gallons and over.....do....	1	-	-	-	-	-	-	1
Employees.....do....	11,138	1,698	159	510	-	8,771	-	(D)
At establishments reporting water use.....do....	10,731	1,450	(D)	510	-	8,771	-	(D)
Value added in mining.....\$1,000..	173,821	23,681	1,808	6,539	-	141,793	-	(D)
Value added at establishments reporting water use.....do....	167,299	24,056	(D)	6,539	-	141,793	-	(D)
Miscellaneous Oil and Gas Field Services Subindustry								
Establishments, total.....number..	2,735	2,630	72	23	5	2	3	-
Reporting water use, total.....do....	1,103	1,003	68	22	5	2	3	-
By source of water:								
Utility.....do....	294	263	21	7	2	-	1	-
Other than utility.....do....	599	540	41	12	2	2	2	-
Source not specified.....do....	210	200	6	3	1	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	1,070	983	66	17	2	1	1	-
1 to 9 million gallons.....do....	23	14	2	4	1	1	1	-
10 to 19 million gallons.....do....	4	2	-	-	2	-	-	-
20 to 99 million gallons.....do....	3	1	-	1	-	-	1	-
100 million gallons and over.....do....	3	3	-	-	-	-	-	-
Employees.....do....	37,136	21,321	4,891	3,170	7,754	(D)	(D)	-
At establishments reporting water use.....do....	31,327	23,573	(D)	(D)	7,754	(D)	(D)	-
Value added in mining.....\$1,000..	324,208	186,737	35,462	23,667	78,342	(D)	(D)	-
Value added at establishments reporting water use.....do....	161,499	83,157	(D)	(D)	78,342	(D)	(D)	-

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.

<sup>1</sup>For industries 1381 and 1382, includes figures for number of employees at separately reported central offices and related facilities which were not distributed by size of establishment.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour: 1963

(Not applicable for these industries)

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963

Ratio of payroll to value added in mining <sup>1</sup>	Establishments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expendi- tures
		Total	Payroll	Total	Man-hours	Wages			
	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
INDUSTRY 1381.—DRILLING OIL AND GAS WELLS									
All establishments, total.....	2,836	55,416	318,150	50,333	106,266	281,064	653,337	979,316	148,026
Less than 0.10.....	51	280	445	267	337	402	10,697	14,423	3,514
0.10 to 0.19.....	81	433	1,789	376	879	1,549	11,982	12,869	983
0.20 to 0.29.....	219	3,679	19,188	3,402	7,274	17,871	76,416	89,495	17,661
0.30 to 0.39.....	323	7,419	42,506	6,777	13,672	37,494	120,456	158,700	17,689
0.40 to 0.49.....	870	14,182	77,696	13,127	27,387	70,546	171,357	236,911	48,639
0.50 to 0.59.....	361	11,984	68,888	10,997	24,035	61,266	128,884	197,167	27,213
0.60 to 0.69.....	219	7,599	48,110	6,866	14,593	42,253	74,676	128,261	13,541
0.70 to 0.79.....	124	3,079	18,399	2,764	5,980	16,757	24,812	45,803	4,418
0.80 to 0.89.....	46	1,239	8,164	1,134	2,551	7,240	9,607	21,663	2,278
0.90 to 0.99.....	36	1,012	6,044	869	2,106	5,063	6,476	14,534	970
1.00 and over.....	166	3,245	17,930	2,944	6,163	15,487	12,367	39,967	4,507
Undistributed <sup>2</sup> .....	340	1,265	8,991	810	1,289	5,136	5,607	19,523	6,613
INDUSTRY 1382.—OIL AND GAS FIELD EXPLORATION SERVICES									
All establishments, total.....	373	8,683	47,828	7,232	16,246	36,915	89,988	119,824	11,726
Less than 0.10.....	13	16	37	16	31	37	1,190	2,111	112
0.10 to 0.19.....	22	37	179	37	78	179	1,092	1,621	185
0.20 to 0.29.....	28	643	3,836	563	842	3,013	15,126	17,828	1,906
0.30 to 0.39.....	35	589	3,010	545	1,148	2,783	8,246	10,796	532
0.40 to 0.49.....	66	1,872	10,459	1,585	3,739	8,086	22,820	27,910	2,470
0.50 to 0.59.....	59	1,010	4,643	910	1,757	3,946	8,692	11,315	821
0.60 to 0.69.....	38	1,405	8,058	1,170	2,748	6,612	12,643	16,998	2,134
0.70 to 0.79.....	15	1,852	10,376	1,489	3,777	7,380	13,749	19,828	2,608
0.80 to 0.89.....	16	897	4,534	755	1,754	3,969	5,374	9,246	640
0.90 to 0.99.....	2	157	716	136	316	595	499	1,069	139
1.00 and over.....	15	205	1,980	26	56	315	557	1,102	179
Undistributed <sup>2</sup> .....	64								
INDUSTRY 1389.—OIL AND GAS FIELD SERVICES, N.E.C.									
All establishments, total.....	3,003	48,274	265,749	39,028	84,076	199,414	498,029	718,754	68,154
Less than 0.10.....	97	157	183	145	286	170	4,170	5,023	691
0.10 to 0.19.....	176	716	2,538	634	1,263	2,038	14,865	19,881	1,182
0.20 to 0.29.....	304	1,365	5,883	1,151	2,234	4,771	23,117	26,115	2,481
0.30 to 0.39.....	361	6,973	45,940	6,009	14,849	38,224	122,955	171,106	16,885
0.40 to 0.49.....	476	10,918	63,383	8,601	18,699	43,471	135,605	175,210	16,847
0.50 to 0.59.....	548	11,532	57,501	9,540	20,585	46,198	104,007	155,790	13,375
0.60 to 0.69.....	276	5,878	29,396	4,964	9,585	23,510	45,247	56,281	4,342
0.70 to 0.79.....	138	3,784	18,662	3,196	6,518	14,525	25,023	42,869	4,636
0.80 to 0.89.....	81	1,503	7,750	1,289	2,786	6,496	9,214	12,470	1,014
0.90 to 0.99.....	32	632	3,009	558	1,218	2,556	3,233	5,222	373
1.00 and over.....	177	3,530	21,000	2,757	5,727	15,644	6,523	39,473	4,662
Undistributed <sup>2</sup> .....	337	1,286	10,504	184	326	1,811	4,070	9,314	1,666
Survey, Log, Cement Services Subindustry									
All establishments, total.....	268	11,138	81,805	8,251	20,584	55,201	173,821	245,335	23,999
Less than 0.10.....	12	18	38	15	34	32	784	908	38
0.10 to 0.19.....	21	44	178	35	80	133	1,144	1,209	170
0.20 to 0.29.....	35	249	1,438	176	423	1,085	5,363	5,873	358
0.30 to 0.39.....	46	4,477	33,907	3,984	10,709	29,231	89,167	130,945	12,441
0.40 to 0.49.....	43	3,629	26,898	2,578	5,513	14,790	55,178	76,164	7,728
0.50 to 0.59.....	30	1,175	8,297	829	2,324	5,786	14,913	19,506	2,238
0.60 to 0.69.....	14	110	656	97	191	585	1,016	1,319	59
0.70 to 0.79.....	11	337	2,243	288	732	1,902	2,984	4,433	453
0.80 to 0.89.....	10	117	628	81	191	430	733	847	28
0.90 to 0.99.....	3	43	276	35	70	186	286	376	17
1.00 and over.....	14	939	7,246	132	315	947	805	1,663	351
Undistributed <sup>2</sup> .....	29			1	2	94	1,448	2,092	118
Miscellaneous Oil and Gas Field Services Subindustry									
All establishments, total.....	2,735	37,136	183,944	30,777	63,492	144,213	324,208	473,419	44,155
Less than 0.10.....	85	139	145	130	252	138	3,386	4,115	653
0.10 to 0.19.....	155	672	2,360	599	1,183	1,905	13,721	18,672	1,012
0.20 to 0.29.....	269	1,116	4,445	975	1,811	3,686	17,754	20,242	2,123
0.30 to 0.39.....	315	2,496	12,033	2,025	4,140	8,993	33,788	40,161	4,444
0.40 to 0.49.....	433	7,289	36,485	6,023	13,186	28,681	80,427	99,046	9,119
0.50 to 0.59.....	518	10,357	49,204	8,711	18,261	40,412	89,094	136,284	11,137
0.60 to 0.69.....	262	5,768	28,740	4,867	9,394	22,925	44,231	54,962	4,283
0.70 to 0.79.....	127	3,447	16,419	2,908	5,786	12,623	22,039	38,436	4,183
0.80 to 0.89.....	71	1,386	7,122	1,208	2,595	6,066	8,481	11,623	986
0.90 to 0.99.....	29	589	2,733	523	1,148	2,370	2,947	4,846	356
1.00 and over.....	163	3,877	24,258	2,625	5,412	14,697	5,718	37,810	4,311
Undistributed <sup>2</sup> .....	308			183	324	1,717	2,622	7,222	1,548

n.e.c. Not elsewhere classified.

<sup>1</sup>In computing these ratios subcontract employment serving the establishment is excluded. The cost of subcontract work in 1963 amounted to 26 percent of payroll for the Drilling Oil and Gas Wells Industry, to 11 percent for the Oil and Gas Exploration Services Industry, and to 6 percent for the Oil and Gas Field Services, N.E.C., Industry.

<sup>2</sup>Represents establishments with zero or negative value added; establishments with no employees; and, for number of employees and payroll, includes figures for separately reported central offices and related facilities.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963

Value added per employee class <sup>1</sup>	Number of employees	Number of establishments with average employment of—							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1381.—DRILLING OIL AND GAS WELLS									
Total.....	55,416	2,836	2,090	483	177	72	11	3	-
Less than \$3,000.....	2,157	221	201	13	5	2	-	-	-
\$3,000 to \$3,999.....	1,314	93	74	14	4	1	-	-	-
\$4,000 to \$4,999.....	1,922	123	95	21	5	2	-	-	-
\$5,000 to \$5,999.....	2,588	117	79	24	9	5	-	-	-
\$6,000 to \$6,999.....	2,456	126	87	26	10	3	-	-	-
\$7,000 to \$7,999.....	3,444	163	108	36	15	4	-	-	-
\$8,000 to \$8,999.....	2,876	123	72	40	9	2	-	-	-
\$9,000 to \$9,999.....	3,672	239	178	44	14	3	-	-	-
\$10,000 to \$12,499.....	13,185	619	432	125	40	20	2	-	-
\$12,500 to \$14,999.....	8,467	257	171	52	21	7	3	3	-
\$15,000 to \$17,499.....	4,441	129	82	25	10	9	3	-	-
\$17,500 to \$19,999.....	2,905	78	43	17	12	5	1	-	-
\$20,000 and over.....	4,868	216	152	34	19	9	2	-	-
Negative value added.....	707	56	40	12	4	-	-	-	-
No employees.....	-	276	276	-	-	-	-	-	-
Central offices and related facilities	414	-	-	-	-	-	-	-	-
INDUSTRY 1382.—OIL AND GAS EXPLORATION SERVICES									
Total.....	8,683	373	305	33	13	16	4	2	-
Less than \$3,000.....	129	16	13	3	-	-	-	-	-
\$3,000 to \$3,999.....	116	7	5	1	1	-	-	-	-
\$4,000 to \$4,999.....	269	12	8	2	1	1	-	-	-
\$5,000 to \$5,999.....	958	17	10	-	3	4	-	-	-
\$6,000 to \$6,999.....	392	13	9	1	1	2	-	-	-
\$7,000 to \$7,999.....	628	18	11	5	-	2	-	-	-
\$8,000 to \$8,999.....	2,062	40	27	5	3	4	-	1	-
\$9,000 to \$9,999.....	343	24	18	5	1	-	-	-	-
\$10,000 to \$12,499.....	1,214	60	51	5	2	-	2	-	-
\$12,500 to \$14,999.....	1,447	38	30	4	1	1	1	1	-
\$15,000 to \$17,499.....	228	14	11	2	-	1	-	-	-
\$17,500 to \$19,999.....	45	11	11	-	-	-	-	-	-
\$20,000 and over.....	651	43	41	-	-	1	1	-	-
Negative value added.....	26	7	7	-	-	-	-	-	-
No employees.....	-	53	53	-	-	-	-	-	-
Central offices and related facilities	175	-	-	-	-	-	-	-	-
INDUSTRY 1389.—OIL AND GAS FIELD SERVICES, N.E.C.									
Total.....	48,274	3,003	2,569	320	75	26	5	3	5
Less than \$3,000.....	8,226	283	241	29	9	2	-	-	2
\$3,000 to \$3,999.....	1,840	156	133	16	6	1	-	-	-
\$4,000 to \$4,999.....	2,635	206	175	23	6	2	-	-	-
\$5,000 to \$5,999.....	3,930	269	214	38	12	5	-	-	-
\$6,000 to \$6,999.....	3,016	191	143	37	9	2	-	-	-
\$7,000 to \$7,999.....	2,594	196	158	29	7	2	-	-	-
\$8,000 to \$8,999.....	2,784	202	164	33	3	1	1	-	-
\$9,000 to \$9,999.....	3,488	170	134	25	6	4	-	1	-
\$10,000 to \$12,499.....	4,290	307	253	39	10	3	2	-	-
\$12,500 to \$14,999.....	6,045	174	139	28	1	2	1	1	2
\$15,000 to \$17,499.....	1,609	146	136	7	1	1	-	1	-
\$17,500 to \$19,999.....	719	94	88	4	2	-	-	-	-
\$20,000 and over.....	5,848	281	264	11	3	1	1	-	1
Negative value added.....	165	48	47	1	-	-	-	-	-
No employees.....	-	280	280	-	-	-	-	-	-
Central offices and related facilities	1,085	-	-	-	-	-	-	-	-
Survey, Log, Cement Services Subindustry									
Total.....	11,138	268	239	20	3	3	-	1	2
Less than \$3,000.....	3,305	5	4	-	-	-	-	-	1
\$3,000 to \$3,999.....	82	8	7	1	-	-	-	-	-
\$4,000 to \$4,999.....	112	13	12	-	1	-	-	-	-
\$5,000 to \$5,999.....	97	8	7	1	-	-	-	-	-
\$6,000 to \$6,999.....	144	8	3	5	-	-	-	-	-
\$7,000 to \$7,999.....	82	15	15	-	-	-	-	-	-
\$8,000 to \$8,999.....	123	12	10	2	-	-	-	-	-
\$9,000 to \$9,999.....	364	14	10	2	1	1	-	-	-
\$10,000 to \$12,499.....	251	43	40	3	-	-	-	-	-
\$12,500 to \$14,999.....	1,028	17	14	-	-	2	-	1	-
\$15,000 to \$17,499.....	198	24	23	1	-	-	-	-	-
\$17,500 to \$19,999.....	120	13	11	2	-	-	-	-	-
\$20,000 and over.....	59	54	54	3	1	-	-	-	1
Negative value added and central offices and related facilities.....	5,232	1	1	-	-	-	-	-	-
No employees.....	-	28	28	-	-	-	-	-	-

See footnotes at end of table.



TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963—Continued

Value added per employee class <sup>1</sup>	Number of employees	Number of establishments with average employment of--							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
	Miscellaneous Oil and Gas Field Services Subindustry								
Total.....	37,136	2,735	2,330	300	72	23	5	2	3
Less than \$3,000.....	4,921	278	237	29	9	2	-	-	1
\$3,000 to \$3,999.....	1,758	148	126	15	6	1	-	-	-
\$4,000 to \$4,999.....	2,523	193	163	23	5	2	-	-	-
\$5,000 to \$5,999.....	3,833	261	207	37	12	5	-	-	-
\$6,000 to \$6,999.....	2,872	183	140	32	9	2	-	-	-
\$7,000 to \$7,999.....	2,512	181	143	29	7	2	-	-	-
\$8,000 to \$8,999.....	2,661	190	154	31	3	1	1	-	-
\$9,000 to \$9,999.....	3,124	156	124	23	5	3	-	1	-
\$10,000 to \$12,499.....	4,039	264	213	36	10	3	2	-	-
\$12,500 to \$14,999.....	5,017	157	125	28	1	-	1	-	2
\$15,000 to \$17,499.....	1,411	122	113	6	1	1	-	1	-
\$17,500 to \$19,999.....	599	81	77	2	2	-	-	-	-
\$20,000 and over.....		222	210	8	2	1	1	-	-
Negative value added and central offices and related facilities.....	1,866	47	46	1	-	-	-	-	-
No employees.....	-	252	252	-	-	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>In computing these ratios subcontract employment serving the establishment is excluded. The cost of subcontract work in 1963 amounted to 26 percent of payroll for the Drilling Oil and Gas Wells Industry, to 11 percent for the Oil and Gas Exploration Services Industry, and to 6 percent for the Oil and Gas Field Services, N.E.C. Industry.

**TABLE 11. Hourly Earnings of Production, Development, and Exploration Workers for Establishments with 10 or More Employees, by Geographic Areas: 1963**

Hourly earnings classes	Number of employees	Number of establishments with 10 or more employees in—								
		Total	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
INDUSTRY 1381.--DRILLING OIL AND GAS WELLS										
Total.....	150,139	1,237	18	96	95	39	54	770	110	55
Less than \$1.49.....	2,541	107	4	13	9	6	5	65	5	-
\$1.50 to \$1.99.....	4,924	175	5	19	13	17	14	102	5	-
\$2.00 to \$2.49.....	11,234	330	5	29	34	5	14	219	23	1
\$2.50 to \$2.99.....	17,311	334	3	22	20	5	11	225	42	6
\$3.00 to \$3.49.....	6,492	129	-	7	10	1	3	73	26	9
\$3.50 to \$3.99.....	3,264	64	-	3	3	1	4	27	4	22
\$4.00 to \$4.49.....	2,238	29	-	2	-	-	1	13	3	10
\$4.50 and over.....	1,751	52	1	1	4	4	2	32	1	7
No production, development, or exploration workers.....	384	17	-	-	2	-	-	14	1	-
INDUSTRY 1382.--OIL AND GAS EXPLORATION SERVICES										
Total.....	17,966	113	-	2	8	1	5	73	18	6
Less than \$1.49.....	690	15	-	-	-	-	2	10	2	1
\$1.50 to \$1.99.....	1,962	40	-	-	2	-	2	32	4	-
\$2.00 to \$2.49.....	3,037	29	-	1	4	-	-	17	7	-
\$2.50 to \$2.99.....	849	9	-	-	-	-	1	6	1	1
\$3.00 to \$3.49.....	291	9	-	-	2	-	-	3	3	1
\$3.50 to \$3.99.....	794	2	-	-	-	-	-	1	-	1
\$4.00 to \$4.49.....	1	1	-	-	-	-	-	-	-	1
\$4.50 and over.....	7	7	-	1	-	1	-	3	1	1
No production, development, or exploration workers.....	343	1	-	-	-	-	-	1	-	-
INDUSTRY 1389.--OIL AND GAS FIELD SERVICES, N.E.C.										
Total.....	41,808	898	8	41	90	7	26	571	90	65
Less than \$1.49.....	5,107	193	2	7	23	3	6	136	10	6
\$1.50 to \$1.99.....	6,530	221	3	17	20	2	8	147	23	1
\$2.00 to \$2.49.....	8,510	200	2	8	18	1	5	127	34	5
\$2.50 to \$2.99.....	12,771	109	1	4	15	-	3	64	10	12
\$3.00 to \$3.49.....	4,077	51	-	1	3	1	2	24	6	14
\$3.50 to \$3.99.....	1,198	26	-	-	2	-	-	8	2	14
\$4.00 to \$4.49.....	289	12	-	-	-	-	-	5	1	6
\$4.50 and over.....	2,360	51	-	1	4	-	1	35	4	6
No production, development, or exploration workers.....	966	35	-	3	5	-	1	25	-	1
Survey, Log, Cement Services Subindustry										
Total.....	10,593	72	3	3	6	1	2	46	4	7
Less than \$1.49.....	71	5	-	2	-	-	-	3	-	-
\$1.50 to \$1.99.....	282	14	1	-	2	1	-	9	1	-
\$2.00 to \$2.49.....	818	26	1	1	3	-	1	18	1	1
\$2.50 to \$2.99.....	9,100	16	1	-	-	-	-	10	2	3
\$3.00 to \$3.49.....	82	4	-	-	-	-	-	3	-	1
\$3.50 to \$3.99.....	143	3	-	-	1	-	-	1	-	1
\$4.00 to \$4.49.....	-	-	-	-	-	-	-	-	-	-
\$4.50 and over.....	97	2	-	-	-	-	1	-	-	1
No production, development, or exploration workers.....	97	2	-	-	-	-	-	2	-	-
Miscellaneous Oil and Gas Field Services Subindustry										
Total.....	31,215	826	5	38	84	6	24	525	86	58
Less than \$1.49.....	5,036	188	2	5	23	3	6	133	10	6
\$1.50 to \$1.99.....	6,248	207	2	17	18	1	8	138	22	1
\$2.00 to \$2.49.....	7,692	174	1	7	15	1	4	109	33	4
\$2.50 to \$2.99.....	3,671	93	-	4	15	-	3	54	8	9
\$3.00 to \$3.49.....	3,995	47	-	1	3	1	2	21	6	13
\$3.50 to \$3.99.....	1,055	23	-	-	1	-	-	7	2	13
\$4.00 to \$4.49.....	289	12	-	-	-	-	-	5	1	6
\$4.50 and over.....	49	49	-	1	4	-	-	35	4	5
No production, development, or exploration workers.....	3,229	33	-	3	5	-	1	23	-	1

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.

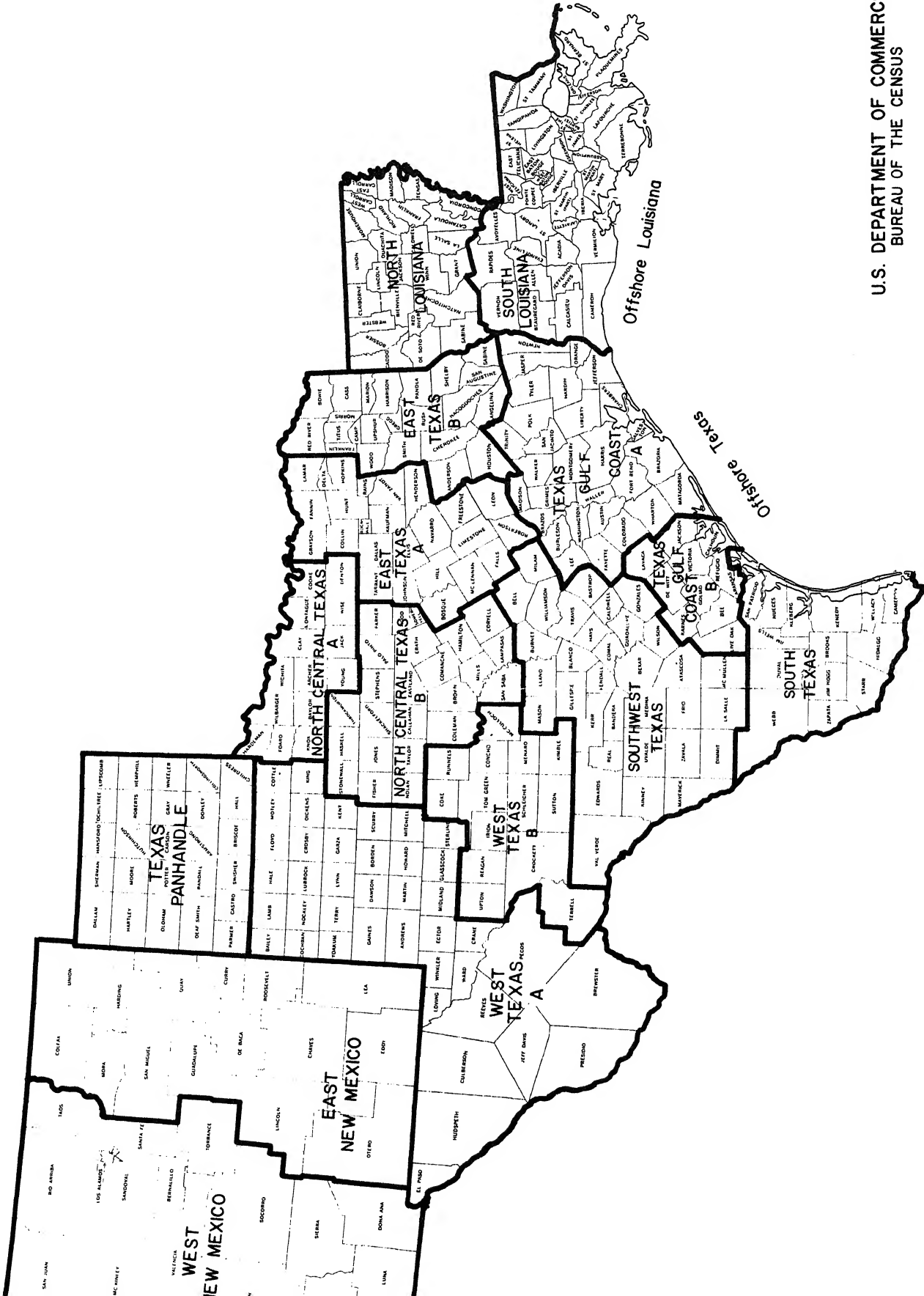
<sup>1</sup>Excludes figures for separately reported central offices and related facilities.

TABLE 12. Distribution of Service Companies by Employment Size and by Number of Establishments: 1963

Establishment count	Number of--		Number of establishments with average employment of--									
	Service companies	Employees	Total	0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1381.—DRILLING OIL AND GAS WELLS												
Total.....	2,671	155,002	2,836	1,168	431	491	483	177	72	11	3	-
Multiunit companies, total.....	287	20,698	452	79	52	78	125	69	38	8	3	-
1 establishment <sup>2</sup> .....	177	10,587	177	23	15	27	53	30	22	5	2	-
2 establishments.....	78	5,892	148	29	20	30	36	22	9	1	1	-
3 or 4 establishments.....	24	1,948	77	20	12	14	22	6	2	1	-	-
5 or 6 establishments.....	6	2,271	33	5	-	4	12	9	2	1	-	-
7 to 9 establishments.....	2		17	2	5	3	2	2	3	-	-	-
Single unit companies.....	2,384	34,304	2,384	1,089	379	413	358	108	34	3	-	-
INDUSTRY 1382.—OIL AND GAS EXPLORATION SERVICES												
Total.....	360	18,508	374	225	36	45	33	13	16	4	2	-
Multiunit companies, total.....	29	4,940	43	6	4	5	9	4	10	3	2	-
1 establishment <sup>2</sup> .....	20	3,000	20	5	1	2	4	1	4	1	2	-
2 establishments.....	7	1,940	14	1	1	2	3	3	2	2	-	-
3 or 4 establishments.....	1		3	-	2	-	-	-	1	-	-	-
5 or 6 establishments.....	1		6	-	-	1	2	-	3	-	-	-
Single unit companies.....	331	3,568	331	219	32	40	24	9	6	1	-	-
INDUSTRY 1389.—OIL AND GAS FIELD SERVICES, N.E.C.												
Total.....	2,901	48,274	3,003	1,575	530	464	320	75	26	5	3	5
Multiunit companies, total.....	108	20,455	210	69	34	35	41	10	9	4	3	5
1 establishment <sup>2</sup> .....	85	12,227	86	24	11	12	18	8	5	2	2	4
2 establishments.....	11	419	22	5	7	3	6	-	1	-	-	-
3 or 4 establishments.....	4	6,146	14	4	1	1	3	1	1	1	1	1
5 or 6 establishments.....	3	346	14	7	5	1	1	-	-	-	-	-
7 to 9 establishments.....	1		8	-	-	1	7	-	-	-	-	-
15 to 19 establishments.....	4	1,317	66	29	10	17	6	1	2	1	-	-
Single unit companies.....	2,793	27,819	2,793	1,506	496	429	279	65	17	1	-	-
Survey, Log, Cement Services Subindustry												
Total.....	240	11,138	268	145	51	43	20	3	3	-	1	2
Multiunit companies, total.....	13	9,657	41	12	5	12	4	2	3	-	1	2
1 establishment <sup>2</sup> .....	10	3,890	10	2	1	-	1	2	3	-	-	1
2 establishments.....	1	5,767	2	-	-	-	-	-	-	-	1	1
10 to 14 establishments.....	1		14	8	3	1	2	-	-	-	-	-
15 to 19 establishments.....	1		15	2	1	11	1	-	-	-	-	-
Single unit companies.....	227	1,481	227	133	46	31	16	1	-	-	-	-
Miscellaneous Oil and Gas Field Services Subindustry												
Total.....	2,665	37,136	2,735	1,430	479	421	300	72	23	5	2	3
Multiunit companies, total.....	99	10,798	169	57	29	23	37	8	6	4	2	3
1 establishment <sup>2</sup> .....	78	8,341	78	24	10	12	17	6	2	2	2	3
2 establishments.....	12	842	24	5	7	3	6	-	2	1	-	-
3 or 4 establishments.....	3	247	10	4	1	1	3	1	-	-	-	-
5 or 6 establishments.....	3	152	17	7	6	2	2	-	-	-	-	-
7 to 9 establishments.....	1	1,216	8	-	-	1	7	-	-	-	-	-
15 to 19 establishments.....	2		32	17	5	4	2	1	2	1	-	-
Single unit companies.....	2,566	26,338	2,566	1,373	450	398	263	64	17	1	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.  
<sup>1</sup>Excludes figures for separately reported central offices and related facilities.  
<sup>2</sup>Represents companies having at least one establishment classified in other industries or subindustries.

# 1963 CENSUS OF MINERAL INDUSTRIES



U.S. DEPARTMENT OF COMMERCE  
BUREAU OF THE CENSUS



## NONMETALLIC MINERALS (EXCEPT FUELS) MINING

This report shows 1963 Census of Mineral Industries statistics for establishments classified in Major Group 14, Nonmetallic Minerals (Except Fuels) Mining. The separate industries included in this major group and the reports in which they appear are as follows:

SIC Code and Industry Title	Report
1411—Dimension Stone	MIC63(1)-14B
1421—Crushed and Broken Stone (including riprap)	
1441—Sand and Gravel	MIC63(1)-14C
1452—Bentonite	
1453—Fire Clay	MIC63(1)-14D
1454—Fuller's Earth	
1455—Kaolin and Ball Clay	
1456—Feldspar	
1459—Clay, Ceramic, and Refractory Minerals, Not Elsewhere Classified	
1472—Barite	MIC63(1)-14E
1473—Fluorspar	
1474—Potash, Soda, and Borate Minerals	
1475—Phosphate Rock	
1477—Sulfur	
1479—Chemical and Fertilizer Minerals Mining, Not Elsewhere Classified	MIC63(1)-14F
1481—Nonmetallic Minerals Services	
1492—Gypsum	
1493—Mica	
1494—Native Asphalt and Bitumens	
1495—Pumice and Pumicite	
1496—Talc, Soapstone, and Pyrophyllite	
1497—Natural Abrasives (except Sand)	
1499—Miscellaneous Nonmetallic Minerals, Not Elsewhere Classified	

In addition to the industries listed above, separate subindustry figures are presented for the Dimension Limestone, Dimension Granite, Dimension Stone N.E.C., Crushed and Broken Limestone, Crushed and Broken Granite, Crushed and Broken Stone N.E.C., Construction Sand and Gravel, Glass Sand, Molding Sand, Industrial Sand N.E.C., Asbestos, Diatomite, Perlite, Vermiculite, Greensand, and Other Minerals subindustries and for service subindustries in which establishments are classified on the basis of the primary industry served.

### INDUSTRY DESCRIPTIONS

The Nonmetallic Minerals Mining Industries represent establishments primarily engaged in mining or quarrying, developing mines, or exploring for nonmetallic minerals (except fuels). Also included are certain well and brine operations and primary preparation plants such as those engaged in crushing, grinding, washing, or other concentration.

The manufacture of cement and lime, and the cutting and finishing of stone and stone products (exclusive of associated quarry operations), the manufacture of brick and other structural clay products (including the operation of associated clay pits), and establishments primarily engaged in grinding, pulverizing, or otherwise treating earths, rocks, and minerals, which are not directly associated with the mining activity, are classified in Major Group 32—Stone, Clay, and Glass Products.

#### SUMMARY OF FINDINGS

The combined value of shipments and receipts for all industries in Major Group 14 was \$2,347 million. The value of minerals produced and used in the same establishment or shipped by mines and quarries included in the manufactures census was approximately \$410 million. Hence, the approximate total value of products of all nonmetallic minerals (except fuels) operations was \$2,756 million. The largest industry in Major Group 14 was Crushed and Broken Stone, with value of shipments and receipts amounting to \$795 million. The next largest industry was Sand and Gravel, with value of shipments and receipts amounting to \$678 million. The value of shipments and receipts of the Chemical and Fertilizer Minerals Industries was \$577 million, with value of shipments and receipts of the Potash, Soda, Borate Minerals Industry amounting, \$192 million, the Phosphate Rock Industry, \$162 million, and the Sulfur Industry, \$113 million. Value of shipments and receipts of the Clay and Related Minerals Industries was \$162 million, including the Kaolin and Ball Clay Industry with shipments and receipts of \$66 million. The value of shipments and receipts of the Dimension Stone Industry was \$20 million. The value of shipments and receipts of the Miscellaneous Minerals, N.E.C., Industries was \$102 million. In addition, mining operations included in manufacturing establishments produced and used or shipped crushed and broken stone valued at about \$155 million, dimension stone valued at \$86 million, sand and gravel valued at about \$80 million, clay valued at about \$60 million, and gypsum valued at about \$29 million.

The figures given above for mineral industries represent the gross value of shipments and receipts. Some of them contain duplication because of the inclusion of value of minerals transferred from one establishment to other establishments in the same industry for preparation and to the inclusion of some minerals purchased for resale without further processing. In order to eliminate this duplication, net shipments and receipts figures have been derived for each industry by subtracting from the gross shipments either the value of shipments of minerals to preparation plants or, if the latter figures were not available, the cost of minerals received from other establishments for preparation. In computing net shipments, the value of shipments of products which had been purchased for resale without preparation was also subtracted. For the Nonmetallic Minerals Mining Industries as a whole, net shipments and receipts amounted to \$2,273 million. The industry in this major group most significantly affected by the adjustment for net shipments was Phosphate Rock, for which net shipments and receipts amounted to \$130 million.

Table 1 presents comparative general statistics for all nonmetallic mineral mining operations combined for the census years 1880 to 1963. Table 2A presents general statistics by 3-digit industry groups for the United States and for geographic divisions and States. Table 2B shows some cost, capital, and product details for major nonmetallic minerals mining industries for selected divisions and States. Table 2C shows number of establishments, employment, and value added in mining by major types of operation for selected geographic areas. In table 3, detailed statistics are presented for the United States by 4-digit industries and subindustries and for similar mining operations in manufacturing establishments. Table 4 shows selected statistics for establishments classified by employment size for all nonmetallic minerals mining industries and includes the number of mining operations by employment size for the mineral industries and for mining operations in manufacturing establishments.

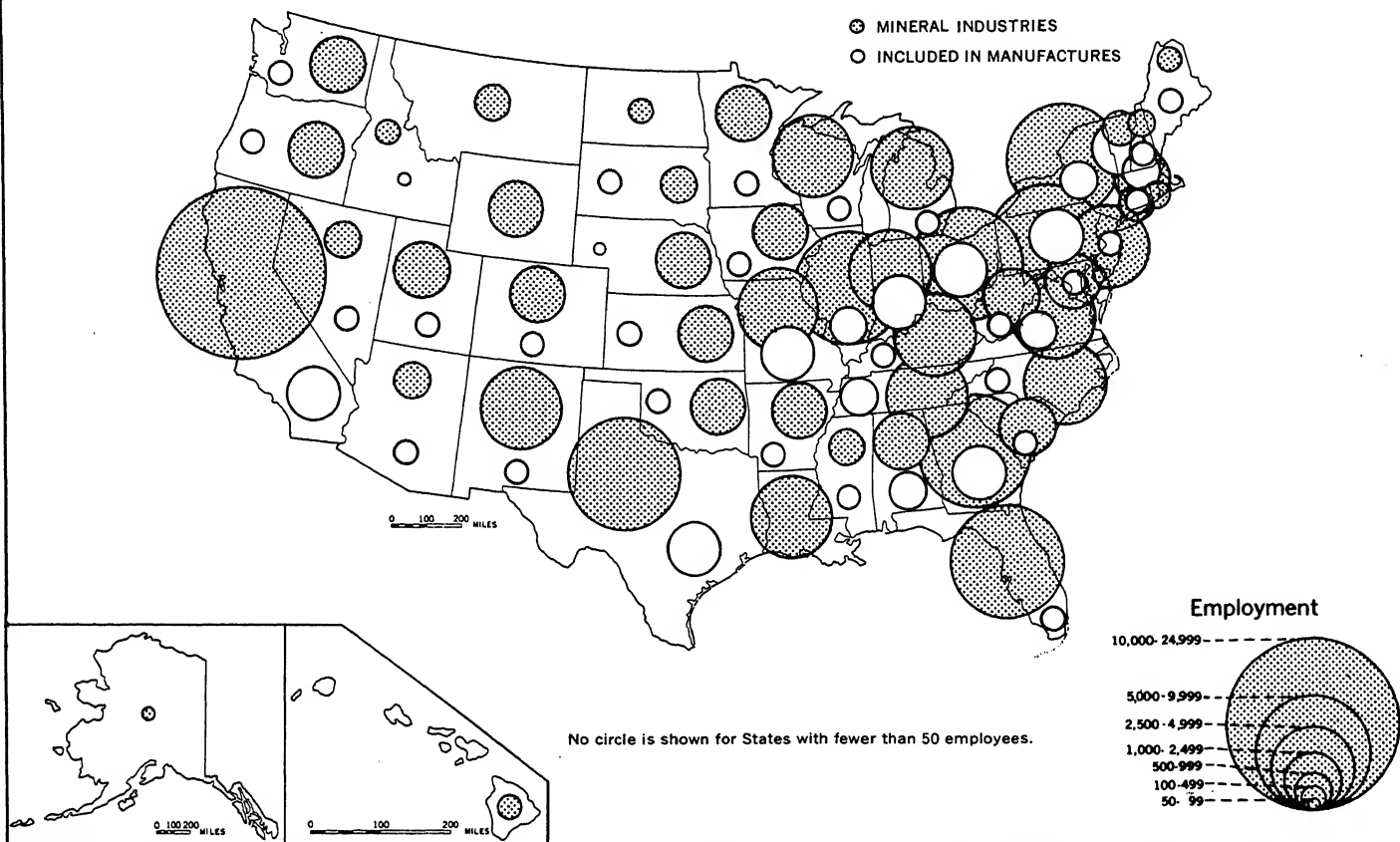
## COVERAGE

As part of the 1963, 1958, and 1954 censuses of manufactures, selected separate data were collected on mine or quarry operations at cement, lime, clay products, and gypsum products plants. For dimension stone quarries operated with dressing plants, which are classified in the manufactures census, complete reports for the quarry and dressing plants essentially comparable to those for the minerals census were obtained. The statistics for all these mining operations which are included in the census of manufactures are summarized in this report and included separately in the reports for the related mineral industries. Such inclusion provides statistics more nearly comparable to those available for minerals censuses prior to 1954.



# NONMETALLIC MINERALS MINING

Distribution of Employment by State: 1963



## Employment, including mining in manufactures: 1840-1963

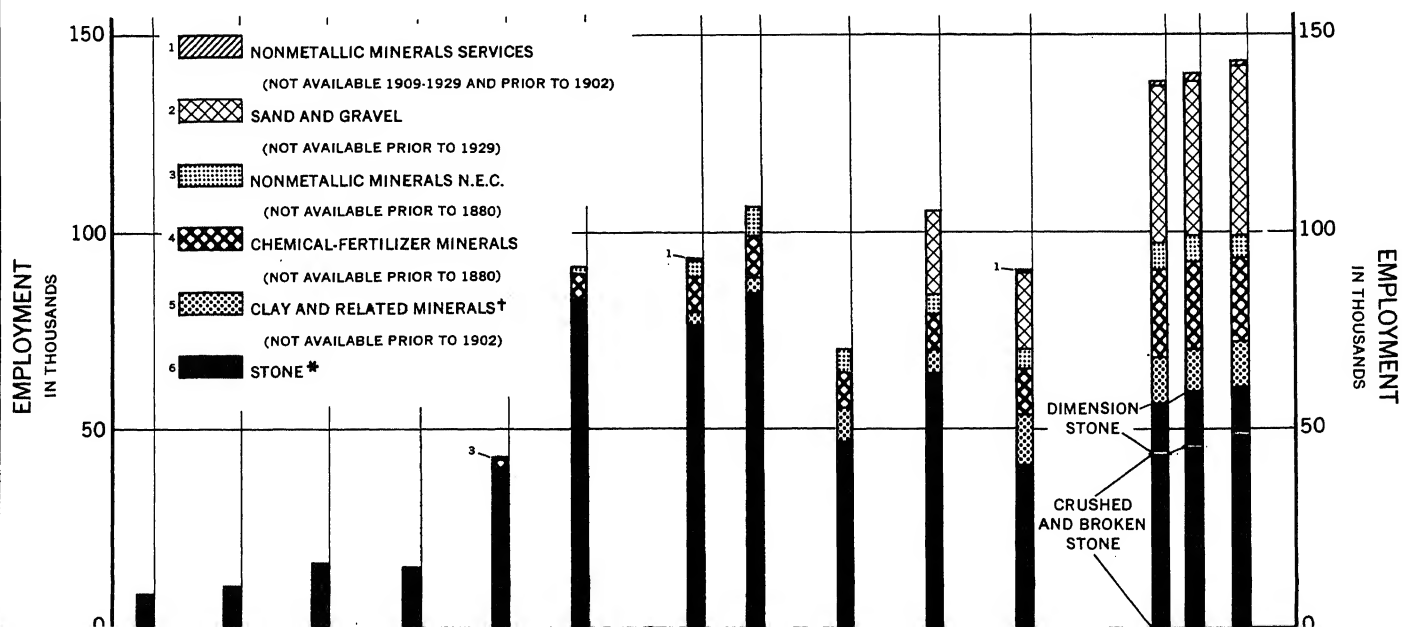


TABLE 1. General Statistics: 1963 and Earlier Years

Kind of operation and year	Operating com- panies (number)	Establishments		All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Selected expenses (\$1,000)				Value of net shipments and receipts <sup>1</sup> (\$1,000)	Value of net shipments and receipts <sup>1</sup> (\$1,000)	Capital expenditures (\$1,000)	Energy used— kwh equivalent (million kwh)	Horse- power rating of power equip- ment (1,000)
		Total	With 20 employ- ees or more	Payroll	Total	Man-hours	Wages	Supplies, purchases for resale, and pur- chased fuels and electric energy		Minerals received for prepa- ration	Contract work	Pur- chased machin- ery installed						
													(number)					
Mineral industries only:	1963.....	7,079	8,421	1,486	121,238	661,453	98,355	212,786	1,744,774	544,700	55,145	77,645	172,167	2,346,903	2,272,580	247,528	56,417	11,343
	1958.....	6,153	7,323	1,436	118,630	553,483	96,827	204,908	1,391,515	447,618	49,615	52,036	130,203	1,881,147	1,820,759	189,840	48,549	(NA)
	1954.....	6,630	8,081	1,310	113,441	449,913	97,112	214,806	2,179,849	323,360	43,165	45,516	130,154	2,577,153	2,517,716	144,958	43,769	7,684
	1954.....	6,630	8,081	1,310	113,441	449,913	97,112	214,806	2,179,849	323,360	43,165	45,516	130,154	2,577,153	2,517,716	144,958	43,769	7,684
Including operations in manufactures:	1963.....	8,497	10,302	1,730	142,667	761,971	118,623	253,624	2,066,014	362,605	58,633	78,088	175,551	2,756,420	2,678,609	423,471	456,792	11,343
	1958.....	7,260	8,897	1,686	139,571	640,976	116,594	243,885	1,691,725	356,588	51,541	51,541	132,517	2,242,923	2,176,665	419,344	449,028	(NA)
	1954.....	7,578	9,298	(NA)	133,701	521,170	116,612	254,369	2,373,485	368,428	44,677	346,150	131,927	2,817,867	2,756,918	416,867	444,371	7,827
	1939 <sup>6</sup> .....	4,127	7,159	(NA)	90,400	104,655	81,287	161,824	255,702	65,071	(NA)	2,270	(NA)	323,043	(NA)	20,200	20,200	2,311
1929 <sup>6</sup> .....	(NA)	4,004	(NA)	106,270	148,299	94,808	(NA)	318,737	86,964	(NA)	(NA)	1,760	20,814	(NA)	407,461	(NA)	28,603	1,651
Excluding sand, gravel, common clay, and shale operations and stone quarries operated as parts of cement and lime plants:	1963.....	(NA)	4,082	1,053	89,883	486,785	73,221	156,074	1,306,474	340,427	54,788	354,595	114,956	1,768,485	1,703,639	417,755	442,578	6,359
	1958.....	(NA)	3,882	1,037	91,423	418,921	75,074	155,296	1,032,080	332,422	51,541	36,848	91,945	1,412,064	1,347,759	412,772	456,187	(NA)
	1954.....	5,301	4,310	(NA)	87,258	338,967	76,082	164,314	496,590	283,009	44,677	31,438	84,233	2,219,254	2,168,856	400,780	45,314	4,632
	1939 <sup>6</sup> .....	2,160	2,694	(NA)	60,524	68,111	54,995	120,557	164,312	41,635	(NA)	1,465	(NA)	207,412	(NA)	15,576	1,590	(NA)
	1929 <sup>6</sup> .....	(NA)	2,694	(NA)	74,209	98,655	66,714	(NA)	206,896	55,787	(NA)	1,465	12,852	(NA)	263,982	(NA)	21,735	921
	1919 <sup>6</sup> .....	(NA)	2,714	(NA)	69,944	77,689	64,113	(NA)	66,421	43,319	49	1,786	(NA)	165,590	165,541	(NA)	12,321	523
	1909 <sup>6</sup> .....	144,875	4,897	(NA)	107,123	48,998	100,767	(NA)	86,562	19,146	(NA)	937	(NA)	106,645	106,645	(NA)	(NA)	416
	1902 <sup>6</sup> .....	16,666	7,640	(NA)	92,220	48,886	185,566	(NA)	74,174	13,109	(NA)	228	(NA)	(NA)	(NA)	(NA)	(NA)	225
	1889 <sup>6</sup> .....	(NA)	(NA)	(NA)	90,489	32,797	85,551	(NA)	50,821	8,588	(NA)	57	(NA)	(NA)	59,466	(NA)	(NA)	76
	1880 <sup>6</sup> .....	(NA)	1,684	(NA)	43,853	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	20,661	(NA)	(NA)

Note: For explanation of column captions, see Introduction.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>For crushed and broken stone, sand and gravel, clay and gypsum mining operations in manufacturing establishments, includes the estimated value of minerals produced and used in the same establishment. For net shipments in 1954, includes resales in 9 industries or parts of industries for which end-resales could not be published separately. For net shipments in 1963 and 1958 for "Excluding sand, gravel, common clay, and shale operations and stone quarries operated as parts of cement and lime plants," includes figures which could not be published separately amounting for 1963 to less than \$1,500 thousand and for 1958 to less than \$300 thousand.

<sup>2</sup>Excludes figures for Alaska.

<sup>3</sup>For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, the cost of contract work is included with the cost of supplies, purchases for resale, and purchased fuels and electric energy.

<sup>4</sup>Excludes data for crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments. Also, for horsepower in 1963 excludes data for dimension stone establish-

ments in manufactures.

<sup>5</sup>Excludes data for sand and gravel mining operations in manufacturing establishments. The value of sand and gravel mined and sold or used at such establishments in 1954 was \$22,784 thousand.

<sup>6</sup>Except for value of shipments and value added, excludes data for dimension stone dressing plants operated in conjunction with quarries. The value added in dressing stone at such operations was \$7,913 thousand; this value has been included in the value of shipments and value added in mining.

<sup>7</sup>Represents number of mines and quarries and, for mining services operations, number of operating companies.

<sup>8</sup>Excludes data for common clay and shale and peat operations. In 1939, there were 609 such mines with products valued at \$6,341 thousand. Also excludes data for 27 nonproducing establishments.

<sup>9</sup>Excludes contract service operations.

<sup>10</sup>Includes data for sand and gravel in Alaska and Hawaii.

<sup>11</sup>Except for number of establishments, excludes data for 1 gypsum mine and 1 marble mine in Alaska.

<sup>12</sup>Excludes purchased electric energy. For 1929, the quantity of purchased electric energy amounted to only 3 percent of the total kw-equivalent of energy used. Also, excludes data for Alaska and Hawaii.

<sup>13</sup>Excludes data for 19 nonproducing establishments.

<sup>14</sup>Represents the sum of the number of operating companies in individual industries or available groups of industries. Probably includes some duplication due to the same company operating in more than one industry.

<sup>15</sup>Includes data for lime plants producing lime valued at \$9,336 thousand. For 1902, data were also obtained from the operators of nonmetallic minerals mines on the average number of employees at contract service operations performed for them. The total number of such employees was reported as 592.

<sup>16</sup>Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958

Ind. code	Industry group and geographic area	1963										1958		
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of materials, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages						
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)					(\$1,000)	(\$1,000)
14	Nonmetallic minerals mining.....	10,302	1,730	142,667	761,971	118,623	253,624	595,630	2,066,014	1,941,877	2,756,420	325,147	139,571	1,691,725
	Mineral industries.....	8,421	1,486	121,238	661,453	98,355	212,786	501,952	1,744,774	849,657	2,346,903	247,528	118,630	1,391,515
	Included in manufactures.....	1,881	244	21,429	100,518	20,268	40,838	93,678	321,240	92,220	409,517	3,943	20,941	300,210
141	Dimension stone.....	551	107	10,987	46,759	9,640	19,462	39,061	70,908	40,327	106,178	5,057	12,250	67,131
	Mineral industry.....	319	25	2,156	7,844	1,970	3,820	6,986	14,842	6,007	19,735	1,114	2,306	13,076
	Included in manufactures.....	232	82	8,831	38,915	7,670	15,642	32,075	56,066	34,320	86,443	3,943	9,944	54,055
142	Crushed and broken stone.....	2,586	767	49,120	260,529	42,070	92,602	209,257	705,553	326,925	949,791	(NA)	46,711	566,066
	Mineral industry.....	2,256	668	43,236	229,115	36,186	80,834	177,843	581,655	295,892	794,860	82,687	24,730	449,419
	Included in manufactures.....	330	99	5,884	31,414	5,884	11,768	31,414	123,898	31,033	154,931	(NA)	4,981	116,647
144	Sand and gravel.....	5,241	534	43,019	224,974	35,919	76,390	183,147	582,696	1250,750	2757,722	(NA)	39,712	499,229
	Mineral industry.....	4,616	512	40,142	212,160	33,042	70,620	170,333	513,728	240,064	678,068	75,724	37,159	435,439
	Included in manufactures.....	625	22	2,877	12,814	2,877	5,770	12,814	68,968	10,686	279,654	(NA)	6,553	63,790
145	Clay and related minerals.....	1,080	136	11,432	55,913	10,263	21,277	47,857	160,006	76,030	221,417	(NA)	11,347	128,954
	Mineral industries.....	423	111	8,316	42,171	7,147	15,061	34,115	113,585	62,678	161,644	14,619	8,773	87,368
	Included in manufactures.....	657	25	43,116	13,742	43,116	6,216	13,742	46,421	13,352	59,773	(NA)	62,574	64,586
147	Chemical and fertilizer minerals.....	235	106	2,040	137,108	14,595	31,213	85,678	433,313	203,612	576,904	60,021	21,899	337,312
148	Nonmetallic minerals services....	119	11	871	4,581	806	1,575	4,209	9,326	5,354	13,246	1,434	1,109	6,217
149	Misc. nonmetallic minerals.....	490	69	6,198	32,107	5,330	11,105	26,421	104,212	38,879	131,162	(NA)	6,519	86,479
	Mineral industries.....	453	53	5,477	28,474	4,609	9,663	22,788	78,325	36,050	102,446	11,929	5,654	62,684
	Included in manufactures.....	37	16	721	3,633	721	1,442	3,633	25,887	2,829	28,716	(NA)	865	23,795
GEOGRAPHIC AREA														
14	New England.....	446	77	6,163	32,603	5,365	11,410	26,956	67,182	31,217	290,366	8,033	6,200	53,518
	Mineral industries.....	346	57	3,712	20,572	3,137	6,729	16,470	42,019	20,891	55,790	7,120	3,295	31,861
	Included in manufactures.....	100	20	2,451	12,031	2,228	4,681	10,486	25,163	10,326	34,576	913	42,905	21,657
141	Dimension stone.....	52	17	2,310	11,222	2,054	4,361	9,425	16,490	8,986	24,310	1,166	2,831	14,924
	Mineral industry.....	21	4	389	1,960	356	742	1,708	3,609	1,428	4,784	253	204	1,037
	Included in manufactures.....	31	13	1,921	9,262	1,698	3,619	7,717	12,881	7,558	19,526	913	2,627	13,887
142	Crushed and broken stone.....	62	21	1,263	7,509	1,079	2,363	6,067	19,519	7,112	25,237	(NA)	1,210	14,872
	Mineral industry.....	40	16	880	5,460	696	1,595	4,018	10,911	4,967	14,484	1,394	1,094	11,022
	Included in manufactures.....	22	5	383	2,049	383	768	2,049	8,608	2,145	10,753	(NA)	116	3,850
144	Sand and gravel.....	290	32	2,070	11,381	1,780	3,741	9,408	25,287	12,551	23,139	(NA)	1,529	18,104
	Mineral industry.....	258	30	1,960	10,813	1,670	3,518	8,840	22,038	12,101	29,440	4,699	1,402	14,762
	Included in manufactures.....	32	2	110	568	110	223	568	3,249	450	3,699	(NA)	127	3,342
145	Clay and related minerals.....	27	4	193	834	169	344	706	1,574	1,215	2,590	(NA)	(NA)	(NA)
	Mineral industries.....	12	4	156	682	132	273	554	1,149	1,042	1,992	199	(NA)	(NA)
	Included in manufactures.....	15	-	37	452	37	71	152	425	173	598	(NA)	(NA)	(NA)
149	Misc. nonmetallic minerals....	12	3	319	1,598	275	580	1,291	4,230	1,319	4,978	571	499	4,451
14	Maine.....	64	8	510	2,119	475	973	1,955	3,699	1,500	4,844	(NA)	580	4,382
	Mineral industries.....	45	2	209	789	191	417	706	1,517	761	1,965	313	301	2,104
	Included in manufactures.....	19	6	301	1,330	284	556	1,249	2,182	739	2,879	(NA)	279	2,278
	Crushed and broken stone.....	7	3	109	506	102	218	454	1,389	401	1,734	(NA)	(NA)	(NA)
144	Sand and gravel.....	39	1	150	518	139	296	487	1,156	569	1,504	(NA)	125	1,077
	Mineral industry.....	33	1	143	485	132	282	454	899	526	1,204	221	105	907
14	New Hampshire:													
	Mineral industries.....	32	3	217	1,180	167	375	863	2,184	1,388	3,102	470	234	1,977
144	Sand and gravel:													
	Mineral industry.....	25	2	154	880	121	277	643	1,761	1,126	2,510	377	89	884
14	Vermont.....	61	14	2,064	9,449	1,857	4,024	8,198	16,355	7,812	22,599	3,568	2,571	15,766
	Mineral industries.....	44	10	846	4,137	740	1,583	3,435	8,780	3,332	11,072	1,040	790	6,823
	Included in manufactures.....	17	4	1,218	5,312	1,117	2,441	4,763	7,575	4,480	11,527	528	4,781	8,943
	Dimension stone.....	22	8	1,559	7,038	1,431	3,095	6,277	10,659	5,583	15,499	743	1,963	9,754
142	Crushed and broken stone:													
	Mineral industry.....	7	1	95	495	81	196	351	1,027	594	1,405	216	158	1,686
144	Sand and gravel:													
	Mineral industry.....	20	1	76	247	60	127	233	355	294	590	59	91	670

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958—Con.

Ind. code	Industry group and geographic area	1963											1958	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of materials, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages						
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)						
14	New England—Continued													
	Massachusetts.....	158	31	2,036	11,425	1,699	3,550	9,037	25,304	<sup>1</sup> 11,742	<sup>2</sup> 33,816	<sup>3</sup> 3,230	(NA)	18,656
	Mineral industries.....	128	24	1,469	8,161	1,216	2,562	6,508	16,902	8,687	22,442	<sup>3</sup> 1,147	(NA)	10,624
	Included in manufactures.....	30	7	<sup>4</sup> 567	<sup>4</sup> 3,264	<sup>4</sup> 483	988	2,529	8,402	<sup>1</sup> 3,055	<sup>2</sup> 11,374	<sup>3</sup> 83	(NA)	8,032
	Dimension stone.....	13	4	389	2,375	299	620	1,600	3,374	1,594	4,882	86	(NA)	(NA)
142	Crushed and broken stone.....	24	9	517	2,872	431	909	2,344	7,675	<sup>1</sup> 3,302	<sup>2</sup> 10,430	(NA)	450	6,640
	Mineral industry.....	13	7	393	2,258	307	662	1,730	4,575	1,932	5,960	547	400	4,464
	Included in manufactures.....	11	2	<sup>4</sup> 124	<sup>4</sup> 614	<sup>4</sup> 124	247	614	3,100	<sup>1</sup> 1,370	<sup>2</sup> 4,470	(NA)	<sup>4</sup> 50	2,176
144	Sand and gravel.....	116	17	1,094	6,061	938	1,957	4,995	13,858	<sup>1</sup> 6,692	<sup>2</sup> 17,983	(NA)	671	8,678
	Mineral industry.....	109	16	1,026	5,709	870	1,821	4,643	11,876	6,472	15,781	2,567	589	6,112
	Included in manufactures.....	7	1	<sup>4</sup> 68	<sup>4</sup> 352	<sup>4</sup> 68	136	352	1,982	<sup>1</sup> 220	<sup>2</sup> 2,202	(NA)	<sup>4</sup> 82	2,566
	Clay and related minerals.....	5	1	<sup>4</sup> 34	<sup>4</sup> 117	<sup>4</sup> 31	64	98	397	<sup>1</sup> 154	<sup>2</sup> 521	(NA)	(NA)	(NA)
14	Rhode Island:													
	Mineral industries.....	21	4	204	1,135	176	362	902	2,018	903	2,661	260	147	1,377
144	Sand and gravel:													
	Mineral industry.....	17	2	138	842	117	239	705	1,321	682	1,832	171	105	1,116
	Connecticut:													
	Included in manufactures.....	25	2	<sup>4</sup> 237	<sup>4</sup> 1,361	<sup>4</sup> 237	474	1,361	5,402	<sup>1</sup> 724	<sup>2</sup> 6,124	(NA)	<sup>4</sup> 68	1,144
142	Crushed and broken stone.....	18	6	461	3,259	397	896	2,669	8,516	<sup>1</sup> 2,490	<sup>2</sup> 10,575	(NA)	(NA)	(NA)
	Mineral industry.....	13	5	271	2,135	207	515	1,545	4,073	2,059	5,701	431	397	3,971
	Included in manufactures.....	5	1	<sup>4</sup> 190	<sup>4</sup> 1,124	<sup>4</sup> 190	381	1,124	4,443	<sup>1</sup> 431	<sup>2</sup> 4,874	(NA)	(NA)	(NA)
144	Sand and gravel.....	67	9	449	2,796	396	825	2,308	6,548	<sup>1</sup> 3,145	<sup>2</sup> 8,389	(NA)	446	5,503
	Mineral industry.....	54	8	423	2,650	370	772	2,162	5,826	3,001	7,523	1,304	423	5,073
	Included in manufactures.....	13	1	<sup>4</sup> 26	<sup>4</sup> 146	<sup>4</sup> 26	53	146	722	<sup>1</sup> 144	<sup>2</sup> 866	(NA)	<sup>4</sup> 23	430
	Clay and related minerals.....	8	1	<sup>4</sup> 83	<sup>4</sup> 399	<sup>4</sup> 77	158	363	860	<sup>1</sup> 801	<sup>2</sup> 1,539	122	(NA)	(NA)
14	Middle Atlantic.....	1,084	216	17,511	105,508	13,964	29,974	76,992	248,325	<sup>1</sup> 104,141	<sup>2</sup> 326,334	<sup>3</sup> 26,132	17,407	211,884
	Mineral industries.....	842	174	14,588	90,801	11,109	24,238	62,719	202,145	90,825	287,062	25,908	14,418	166,036
	Included in manufactures.....	242	42	<sup>4</sup> 2,923	<sup>4</sup> 14,707	<sup>4</sup> 2,855	5,736	14,273	46,180	<sup>1</sup> 13,316	<sup>2</sup> 59,272	<sup>3</sup> 224	<sup>4</sup> 2,989	45,848
141	Dimension stone.....	84	13	970	3,958	875	1,716	3,399	5,602	3,296	8,546	352	1,091	6,002
	Mineral industry.....	46	3	270	864	243	431	739	1,514	504	1,890	128	(NA)	(NA)
	Included in manufactures.....	38	10	700	3,094	632	1,285	2,660	4,088	2,792	6,656	224	(NA)	(NA)
142	Crushed and broken stone.....	331	126	8,563	52,712	6,907	15,329	39,097	131,486	<sup>1</sup> 60,014	<sup>2</sup> 176,718	(NA)	8,793	115,940
	Mineral industry.....	276	105	7,402	46,187	5,746	13,008	32,572	109,545	54,183	148,946	14,782	7,561	89,266
	Included in manufactures.....	55	21	<sup>4</sup> 1,161	<sup>4</sup> 6,525	<sup>4</sup> 1,161	2,321	6,525	21,941	<sup>1</sup> 5,831	<sup>2</sup> 27,772	(NA)	<sup>4</sup> 1,232	26,674
144	Sand and gravel.....	485	57	4,932	28,290	4,106	8,420	22,581	70,452	<sup>1</sup> 26,393	<sup>2</sup> 89,141	(NA)	4,541	56,811
	Mineral industry.....	418	55	4,520	26,517	3,694	7,595	20,808	61,410	24,606	78,312	7,704	4,257	50,046
	Included in manufactures.....	67	2	<sup>4</sup> 412	<sup>4</sup> 1,773	<sup>4</sup> 412	825	1,773	9,042	<sup>1</sup> 1,787	<sup>2</sup> 10,829	(NA)	<sup>4</sup> 284	6,765
	Clay and related minerals.....	134	11	<sup>4</sup> 986	<sup>4</sup> 4,999	<sup>4</sup> 916	1,820	4,424	14,754	<sup>1</sup> 5,896	<sup>2</sup> 19,806	(NA)	(NA)	(NA)
147	Chemical and fertilizer													
	minerals.....	8	3	1,309	10,844	521	1,308	3,457	15,872	4,778	19,267	1,383	(NA)	(NA)
	Miscellaneous minerals, n.e.c.....	35	6	<sup>4</sup> 732	<sup>4</sup> 4,633	<sup>4</sup> 621	1,346	3,963	9,929	<sup>1</sup> 3,563	<sup>2</sup> 12,472	(NA)	<sup>4</sup> 808	9,525
14	New York.....	392	66	6,265	42,353	4,845	10,477	29,687	95,925	<sup>1</sup> 33,947	<sup>2</sup> 121,290	<sup>3</sup> 8,582	6,003	89,591
	Mineral industries.....	320	56	5,489	38,452	4,083	8,966	25,837	83,884	30,022	105,402	8,304	5,200	75,960
	Included in manufactures.....	72	10	<sup>4</sup> 776	<sup>4</sup> 3,901	<sup>4</sup> 762	1,511	3,850	12,041	<sup>1</sup> 3,925	<sup>2</sup> 15,888	<sup>3</sup> 78	<sup>4</sup> 803	13,631
141	Dimension stone.....	22	3	206	779	181	341	673	1,330	833	2,043	120	(NA)	(NA)
	Mineral industry.....	10	1	76	280	65	122	225	587	184	729	42	69	473
	Included in manufactures.....	12	2	130	499	116	219	448	743	649	1,314	78	(NA)	(NA)
142	Crushed and broken stone.....	81	32	2,355	15,895	1,867	4,168	11,862	39,730	<sup>1</sup> 15,459	<sup>2</sup> 51,834	(NA)	2,311	35,918
	Mineral industry.....	67	28	2,176	14,832	1,688	3,811	10,799	35,958	14,506	47,109	3,355	2,068	30,195
	Included in manufactures.....	14	4	<sup>4</sup> 179	<sup>4</sup> 1,063	<sup>4</sup> 179	397	1,063	3,772	<sup>1</sup> 953	<sup>2</sup> 4,725	(NA)	<sup>4</sup> 243	5,723
144	Sand and gravel.....	244	19	1,942	11,916	1,571	3,119	9,037	28,206	<sup>1</sup> 9,506	<sup>2</sup> 35,124	(NA)	(NA)	(NA)
	Mineral industry.....	217	19	1,701	10,819	1,330	2,637	7,940	23,488	8,228	29,128	2,588	1,753	25,375
	Included in manufactures.....	27	-	<sup>4</sup> 241	<sup>4</sup> 1,097	<sup>4</sup> 241	482	1,097	4,718	<sup>1</sup> 1,278	<sup>2</sup> 5,996	(NA)	(NA)	(NA)
149	Misc. nonmetallic minerals:													
	Mineral industries.....	14	3	530	3,603	432	950	2,985	7,829	2,563	9,531	861	(NA)	(NA)

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958—Con.

Ind. code	Industry group and geographic area	1963										1958		
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of materials, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages						
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
14	Middle Atlantic—Continued													
	New Jersey.....	175	45	3,282	20,767	2,571	5,791	14,757	50,147	123,970	267,266	(NA)	2,830	31,996
	Mineral industries.....	150	43	2,964	19,222	2,253	5,151	13,212	45,995	23,237	62,381	6,851	2,719	28,971
	Included in manufactures.....	25	2	318	4,545	318	640	1,545	4,152	733	24,885	(NA)	111	3,025
142	Crushed and broken stone.....	36	25	1,766	12,494	1,288	3,118	7,912	27,225	13,971	237,122	(NA)	(NA)	(NA)
	Mineral industry.....	30	23	1,522	11,319	1,044	2,630	6,737	25,184	13,526	34,636	4,074	1,138	14,747
	Included in manufactures.....	6	2	244	4,175	244	488	1,175	2,041	445	22,486	(NA)	(NA)	(NA)
144	Sand and gravel.....	116	20	1,388	7,662	1,170	2,443	6,372	21,405	9,072	27,882	(NA)	(NA)	(NA)
	Mineral industry.....	107	20	1,353	7,474	1,135	2,373	6,184	19,822	8,930	26,157	2,595	1,174	12,889
	Included in manufactures.....	9	-	35	188	35	70	188	1,583	142	21,725	(NA)	(NA)	(NA)
14	Clay and related minerals:													
	Included in manufactures.....	10	-	439	4182	439	82	182	528	146	2674	(NA)	(NA)	(NA)
	Pennsylvania.....	517	105	7,964	42,388	6,548	13,706	32,548	102,253	146,224	2137,778	10,699	8,574	90,297
	Mineral industries.....	372	75	6,135	33,127	4,773	10,121	23,670	72,266	37,566	99,279	10,553	6,499	61,105
	Included in manufactures.....	145	30	41,829	49,261	41,775	3,585	8,878	29,987	18,658	38,999	3146	42,075	29,192
141	Dimension stone.....	62	10	764	3,179	694	1,375	2,726	4,272	2,463	6,503	232	821	4,237
	Mineral industry.....	36	2	194	584	178	309	514	927	320	1,161	86	196	1,088
	Included in manufactures.....	26	8	570	2,595	516	1,066	2,212	3,345	2,143	5,342	146	625	3,149
142	Crushed and broken stone.....	214	69	4,442	24,323	3,752	8,043	19,323	64,531	30,584	287,762	(NA)	5,344	65,275
	Mineral industry.....	179	54	3,704	20,036	3,014	6,567	15,036	48,403	26,151	67,201	7,353	4,355	44,324
	Included in manufactures.....	35	15	738	44,287	738	1,476	4,287	16,128	4,433	20,561	(NA)	4989	20,951
144	Sand and gravel.....	125	18	1,604	8,712	1,365	2,858	7,172	20,841	17,815	26,135	(NA)	1,480	13,590
	Mineral industry.....	94	16	1,468	8,224	1,229	2,585	6,684	18,100	7,448	23,027	2,521	1,330	11,782
	Included in manufactures.....	31	2	136	488	136	273	488	2,741	367	23,108	(NA)	150	1,808
145	Clay and related minerals.....	95	8	675	3,083	645	1,234	2,960	11,569	13,506	24,551	(NA)	663	8,409
	Mineral industries.....	42	3	290	1,192	260	464	1,069	3,796	1,791	5,063	524	352	3,125
	Included in manufactures.....	53	5	4385	41,891	4385	770	1,891	7,773	11,715	29,488	(NA)	4311	5,284
14	East North Central.....	2,285	288	26,014	143,666	21,107	44,625	109,888	354,429	145,043	2460,561	338,911	27,320	316,963
	Mineral industries.....	1,893	241	21,659	122,151	16,987	36,423	89,967	290,818	127,639	380,348	38,109	23,085	259,012
	Included in manufactures.....	392	47	44,355	421,515	44,120	8,202	19,921	63,611	17,404	280,213	3802	44,235	57,951
141	Dimension stone.....	111	22	2,385	11,429	2,101	4,198	9,591	16,766	7,471	23,244	933	2,573	15,947
	Mineral industry.....	60	5	362	1,576	313	626	1,332	3,078	878	3,765	191	(NA)	(NA)
	Included in manufactures.....	51	17	2,023	9,853	1,788	3,572	8,259	13,688	6,593	19,479	802	(NA)	(NA)
142	Crushed and broken stone.....	523	125	10,243	57,400	8,589	18,471	44,985	150,052	166,140	2199,453	(NA)	10,994	134,929
	Mineral industry.....	466	110	9,305	52,224	7,651	16,594	39,809	130,419	60,559	174,239	16,739	10,066	114,249
	Included in manufactures.....	57	15	938	45,176	938	1,877	5,176	19,633	15,581	25,214	(NA)	4928	20,680
144	Sand and gravel.....	1,345	106	9,496	52,346	7,592	16,069	40,658	135,498	153,298	2171,542	(NA)	10,042	127,460
	Mineral industry.....	1,232	99	9,027	50,268	7,123	15,129	38,580	123,570	51,947	158,263	17,254	9,700	116,602
	Included in manufactures.....	113	7	469	42,078	469	940	2,078	11,928	11,351	213,279	(NA)	4342	10,858
145	Clay and related minerals.....	213	18	1,427	7,316	1,354	2,741	6,713	20,460	17,774	227,492	(NA)	1,317	15,634
	Mineral industries.....	48	13	628	3,569	555	1,180	2,966	7,142	4,275	10,675	742	512	5,712
	Included in manufactures.....	165	5	4799	43,747	4799	1,561	3,747	13,318	13,499	216,817	(NA)	4805	9,922
147	Chemical and fertilizer minerals.....	15	7	1,775	12,069	872	1,910	5,356	18,297	6,869	22,818	2,348	(NA)	(NA)
148	Nonmetallic minerals services..	18	-	68	265	61	109	232	517	306	695	128	71	632
149	Misc. nonmetallic minerals.....	60	10	620	2,841	538	1,127	2,353	12,839	13,185	215,317	(NA)	(NA)	(NA)
	Mineral industries.....	54	7	494	2,180	412	875	1,692	7,795	2,805	9,893	707	(NA)	(NA)
	Included in manufactures.....	6	3	126	2661	4126	252	661	5,044	1380	25,424	(NA)	(NA)	(NA)
10814	Ohio.....	652	92	8,189	48,491	6,486	13,776	33,021	108,251	141,671	2137,710	312,209	8,306	89,101
	Mineral industries.....	489	74	6,564	40,363	4,924	10,683	25,329	85,044	35,176	108,118	12,099	6,828	66,790
	Included in manufactures.....	163	18	1,625	48,128	1,562	3,093	7,692	23,207	16,495	229,592	3110	41,478	22,311
142	Dimension stone.....	14	3	569	2,634	492	966	2,097	3,906	1,069	4,857	118	331	1,726
	Crushed and broken stone.....	132	42	3,177	16,859	2,744	6,032	13,811	44,045	19,635	258,507	(NA)	4,022	43,126
	Mineral industry.....	105	34	2,678	14,082	2,499	5,033	11,034	35,578	16,770	47,175	5,173	3,485	30,323
	Included in manufactures.....	27	8	499	42,777	499	999	2,777	8,467	12,865	211,332	(NA)	4537	12,803
144	Sand and gravel.....	366	32	2,626	14,135	2,146	4,489	11,033	39,215	12,441	247,225	(NA)	2,674	33,504
	Mineral industry.....	326	30	2,546	13,737	2,066	4,329	10,635	37,107	12,180	44,856	4,431	2,604	31,576
	Included in manufactures.....	40	2	80	398	80	160	398	2,108	261	2,369	(NA)	470	1,928
145	Clay and related minerals.....	115	12	827	4,301	775	1,547	3,818	11,837	13,624	215,080	(NA)	791	9,515
	Mineral industries.....	27	8	349	1,997	297	604	1,514	4,077	1,413	5,109	381	289	4,020
	Included in manufactures.....	88	4	478	42,304	478	943	2,304	7,760	12,211	29,971	(NA)	4502	5,495

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958—Con.

Ind. code	Industry group and geographic area	1963										1958		
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of materials, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages						
14	East North Central—Continued													
	Indiana.....	356	56	4,285	21,582	3,589	7,848	18,023	52,162	<sup>1</sup> 22,172	<sup>2</sup> 68,602	<sup>3</sup> 5,732	4,664	44,845
	Mineral industries.....	303	44	2,838	14,565	2,270	5,222	11,885	36,325	16,930	48,033	<sup>5</sup> 2,222	3,014	29,906
	Included in manufactures.....	53	12	<sup>4</sup> 1,447	<sup>4</sup> 7,017	<sup>4</sup> 1,319	2,626	6,138	15,837	<sup>5</sup> 5,242	<sup>2</sup> 20,569	<sup>5</sup> 510	<sup>4</sup> 1,650	14,939
141	Dimension stone.....	31	11	1,352	6,606	1,203	2,429	5,639	9,688	4,386	13,444	630	1,767	11,399
	Mineral industry.....	16	3	177	891	156	337	803	2,039	340	2,259	120	398	2,951
	Included in manufactures.....	15	8	1,175	5,715	1,047	2,092	4,836	7,649	4,046	11,185	510	1,369	8,448
142	Crushed and broken stone.....	87	28	1,444	7,426	1,157	2,702	5,827	18,524	<sup>1</sup> 9,235	<sup>2</sup> 24,921	(NA)	(NA)	(NA)
	Mineral industry.....	82	27	1,371	6,999	1,084	2,557	5,400	16,969	8,650	22,781	<sup>2</sup> 838	1,169	12,989
	Included in manufactures.....	5	1	<sup>4</sup> 73	<sup>4</sup> 27	<sup>4</sup> 73	145	427	1,555	<sup>4</sup> 585	<sup>2</sup> 2,140	(NA)	(NA)	(NA)
144	Sand and gravel.....	201	14	1,265	6,500	1,020	2,306	5,585	17,905	<sup>1</sup> 7,430	<sup>2</sup> 23,201	(NA)	1,407	14,130
	Mineral industry.....	192	13	1,186	6,182	941	2,147	5,267	16,007	7,218	21,091	<sup>2</sup> 134	1,335	12,917
	Included in manufactures.....	9	1	<sup>4</sup> 79	<sup>4</sup> 318	<sup>4</sup> 79	159	318	1,898	<sup>2</sup> 212	<sup>2</sup> 2,110	(NA)	<sup>4</sup> 72	1,213
10814	Illinois <sup>7</sup> .....	478	78	7,209	41,383	5,340	11,453	27,757	89,337	<sup>1</sup> 47,215	<sup>2</sup> 126,991	(NA)	7,325	93,960
	Mineral industries.....	404	72	6,577	38,407	4,708	10,201	24,781	78,313	<sup>1</sup> 44,637	<sup>2</sup> 113,389	<sup>9</sup> 561	6,955	84,087
	Included in manufactures.....	74	6	<sup>4</sup> 632	<sup>4</sup> 2,976	<sup>4</sup> 632	1,252	2,976	11,024	<sup>1</sup> 2,578	<sup>2</sup> 13,602	(NA)	<sup>2</sup> 370	9,873
142	Crushed and broken stone.....	163	35	2,722	15,800	2,300	5,082	12,170	42,823	<sup>1</sup> 18,123	<sup>2</sup> 56,499	(NA)	2,796	45,358
	Mineral industry.....	150	32	2,478	14,514	2,056	4,594	10,884	38,455	16,778	50,786	<sup>4</sup> 447	2,669	41,725
	Included in manufactures.....	13	3	<sup>4</sup> 244	<sup>4</sup> 1,286	<sup>4</sup> 244	488	1,286	4,368	<sup>1</sup> 1,345	<sup>2</sup> 5,713	(NA)	<sup>4</sup> 127	3,633
144	Sand and gravel.....	232	29	2,316	13,084	1,851	3,964	9,974	31,352	<sup>1</sup> 14,166	<sup>2</sup> 41,035	(NA)	2,439	36,769
	Mineral industry.....	209	28	2,150	12,370	1,685	3,632	9,260	27,322	13,720	36,559	<sup>4</sup> 483	2,370	32,745
	Included in manufactures.....	23	1	<sup>4</sup> 166	<sup>4</sup> 714	<sup>4</sup> 166	332	714	4,030	<sup>4</sup> 446	<sup>2</sup> 4,476	(NA)	<sup>4</sup> 69	4,024
145	Clay and related minerals:													
	Mineral industry.....	13	3	195	1,031	183	412	964	2,051	1,545	3,334	262	137	850
14	Michigan.....	419	36	4,170	25,041	3,400	6,862	19,055	72,982	<sup>1</sup> 22,583	<sup>2</sup> 89,163	(NA)	4,653	62,703
	Mineral industries.....	368	31	3,877	23,520	3,110	6,282	17,547	63,310	21,166	78,074	<sup>6</sup> 402	4,307	55,240
	Included in manufactures.....	51	5	<sup>4</sup> 293	<sup>4</sup> 1,521	<sup>4</sup> 290	580	1,508	9,672	<sup>1</sup> 8,417	<sup>2</sup> 11,089	(NA)	<sup>2</sup> 346	7,463
142	Crushed and broken stone.....	52	9	1,473	9,331	1,228	2,254	6,931	28,483	<sup>1</sup> 6,585	<sup>2</sup> 33,439	(NA)	(NA)	(NA)
	Mineral industry.....	44	6	1,364	8,690	1,119	2,035	6,290	23,336	5,851	27,558	1,629	1,615	18,444
	Included in manufactures.....	8	3	<sup>4</sup> 109	<sup>4</sup> 641	<sup>4</sup> 109	219	641	5,147	<sup>1</sup> 734	<sup>2</sup> 5,881	(NA)	(NA)	(NA)
144	Sand and gravel.....	308	20	1,997	11,562	1,545	3,227	8,645	30,397	<sup>1</sup> 11,560	<sup>2</sup> 38,087	(NA)	2,168	28,431
	Mineral industry.....	284	18	1,915	11,163	1,463	3,063	8,246	27,996	11,294	35,420	<sup>3</sup> 870	2,102	26,024
	Included in manufactures.....	24	2	<sup>4</sup> 82	<sup>4</sup> 399	<sup>4</sup> 82	164	399	2,401	<sup>2</sup> 266	<sup>2</sup> 2,667	(NA)	<sup>4</sup> 66	2,407
	Clay and related minerals (clay and related minerals, n.e.c.).	14	1	<sup>4</sup> 85	<sup>4</sup> 484	<sup>4</sup> 85	171	484	1,710	<sup>1</sup> 1,068	<sup>2</sup> 2,821	(NA)	(NA)	(NA)
14	Wisconsin.....	386	29	3,126	17,077	2,544	5,193	13,370	35,893	<sup>1</sup> 22,134	<sup>2</sup> 52,813	<sup>3</sup> 5,214	2,908	28,114
	Mineral industries.....	335	23	2,768	15,204	2,227	4,542	11,763	32,022	20,474	47,452	<sup>5</sup> 044	2,517	24,749
	Included in manufactures.....	51	6	<sup>4</sup> 358	<sup>4</sup> 1,873	<sup>4</sup> 317	651	1,607	3,871	<sup>1</sup> 1,660	<sup>2</sup> 5,361	<sup>3</sup> 170	<sup>2</sup> 391	3,365
141	Dimension stone.....	50	7	382	1,915	332	670	1,617	2,858	1,798	4,447	209	399	2,419
	Mineral industry.....	25	2	108	367	99	186	335	687	383	1,031	39	93	524
	Included in manufactures.....	25	5	274	1,548	233	484	1,282	2,171	1,415	3,416	170	306	1,895
142	Crushed and broken stone.....	89	11	<sup>4</sup> 1,427	<sup>4</sup> 7,984	<sup>4</sup> 1,160	2,401	6,246	16,177	<sup>1</sup> 12,562	<sup>2</sup> 26,087	(NA)	(NA)	(NA)
	Mineral industry.....	85	11	1,414	7,939	1,147	2,375	6,201	16,081	12,510	25,939	<sup>2</sup> 652	1,128	10,768
144	Sand and gravel.....	238	11	1,292	7,065	1,030	2,083	5,421	16,629	<sup>1</sup> 7,701	<sup>2</sup> 21,994	(NA)	1,354	14,626
	Mineral industry.....	221	10	1,230	6,816	968	1,958	5,172	15,138	7,533	20,337	<sup>2</sup> 336	1,289	13,340
	Included in manufactures.....	17	1	<sup>4</sup> 62	<sup>4</sup> 249	<sup>4</sup> 62	125	249	1,491	<sup>4</sup> 166	<sup>2</sup> 1,657	(NA)	<sup>4</sup> 65	1,286
14	West North Central.....	1,620	176	13,874	67,588	11,857	25,768	55,106	168,590	<sup>1</sup> 82,240	<sup>2</sup> 228,847	<sup>3</sup> 21,983	13,972	155,938
	Mineral industries.....	1,404	147	11,588	56,830	9,761	21,380	45,660	131,355	72,374	182,133	<sup>2</sup> 1,596	11,300	118,115
	Included in manufactures.....	216	29	<sup>4</sup> 2,286	<sup>4</sup> 10,758	<sup>4</sup> 2,096	4,388	9,446	37,235	<sup>1</sup> 9,866	<sup>2</sup> 46,714	<sup>3</sup> 387	<sup>4</sup> 2,672	37,823
141	Dimension stone.....	50	10	1,226	5,556	1,027	2,258	4,219	10,031	5,063	14,627	467	1,692	10,850
	Mineral industry.....	30	1	171	595	162	327	570	1,410	631	1,961	80	(NA)	(NA)
	Included in manufactures.....	20	9	1,055	4,961	865	1,931	3,649	8,621	4,432	12,666	387	(NA)	(NA)
142	Crushed and broken stone.....	459	100	6,351	32,283	5,490	12,317	26,228	79,276	<sup>1</sup> 40,415	<sup>2</sup> 107,514	(NA)	6,085	72,894
	Mineral industry.....	428	86	5,691	29,048	4,830	10,998	22,993	64,566	37,656	90,105	<sup>12</sup> 117	5,462	57,426
	Included in manufactures.....	31	14	<sup>4</sup> 660	<sup>4</sup> 3,235	<sup>4</sup> 660	1,319	3,235	14,710	<sup>2</sup> 7,759	<sup>2</sup> 17,469	(NA)	<sup>4</sup> 623	15,468
144	Sand and gravel.....	902	44	4,734	22,736	3,980	8,391	18,980	53,805	<sup>1</sup> 27,150	<sup>2</sup> 73,155	(NA)	4,666	48,484
	Mineral industry.....	831	43	4,590	22,122	3,836	8,105	18,366	50,341	26,710	69,251	<sup>7</sup> 800	4,456	44,747
	Included in manufactures.....	71	1	<sup>4</sup> 144	<sup>4</sup> 614	<sup>4</sup> 144	286	614	3,464	<sup>4</sup> 440	<sup>2</sup> 3,904	(NA)	<sup>4</sup> 210	3,737

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958—Con.

Ind. code	Industry group and geographic area	1963											1958	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of materials, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages						
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)					(\$1,000)	(\$1,000)
145	West North Central—Continued Clay and related minerals..... Mineral industries..... Included in manufactures.....	137 50 87	7 7 -	676 381 4295	3,163 1,839 41,324	621 326 4295	1,326 738 588	2,844 1,520 1,324	10,908 6,841 4,067	14,637 3,163 11,469	214,811 25,275 25,536	(NA) 734 (NA)	759 567 4192	10,042 6,758 3,284
147	Chemical and fertilizer minerals.....	20	7	524	2,316	408	828	1,531	(D)	(D)	(D)	(D)	(NA)	(NA)
1481	Nonmetallic minerals services..	30	-	110	401	104	188	385	1,360	656	1,648	368	(NA)	(NA)
149	Misc. nonmetallic minerals..... Mineral industries..... Included in manufactures.....	22 15 7	8 3 5	253 121 4132	1,133 509 4624	227 95 4132	460 196 264	919 295 624	(D) (D) 6,373	(D) (D) 1766	(D) (D) 27,139	(NA) (D) (NA)	234 (NA) (NA)	6,895 (NA) (NA)
14	Minnesota..... Mineral industries..... Included in manufactures.....	288 257 31	25 19 6	92,245 91,814 431	911,561 99,238 42,323	1,780 1,432 348	3,487 2,706 781	8,336 6,621 1,715	22,179 16,882 5,297	110,805 9,392 11,413	230,813 24,223 26,590	32,171 2,051 3120	92,998 92,012 4986	27,446 19,514 7,932
141	Dimension stone..... Mineral industry..... Included in manufactures.....	19 14 5	5 - 5	433 58 375	2,259 212 2,047	348 56 292	777 109 668	1,647 208 1,439	4,476 456 4,020	1,458 234 1,224	5,803 679 5,124	131 11 120	972 88 884	6,708 402 6,306
142	Crushed and broken stone (mineral industry).....	27	9	399	2,040	323	634	1,453	4,174	2,313	5,987	500	542	4,354
144	Sand and gravel..... Mineral industry..... Included in manufactures.....	232 209 23	9 8 1	1,230 1,182 48	6,088 5,854 4234	1,030 982 48	1,915 1,820 95	4,958 4,724 234	12,698 11,518 1,180	16,571 6,411 1160	217,857 16,517 21,340	(NA) 1,412 (NA)	1,358 1,282 476	15,784 14,256 1,528
14	Iowa..... Mineral industries..... Included in manufactures.....	304 256 48	36 29 7	2,676 2,372 4304	13,680 2,144 41,536	2,293 1,989 4304	5,330 4,714 616	10,881 9,345 1,536	38,482 29,730 8,752	117,377 15,607 11,770	250,984 40,486 210,498	34,875 4,851 324	2,721 2,489 4232	37,510 29,128 8,382
142	Crushed and broken stone: Mineral industry.....	115	21	1,600	8,674	1,317	3,239	6,351	20,543	10,838	27,701	3,680	1,731	20,383
144	Sand and gravel..... Mineral industry..... Included in manufactures.....	145 132 13	7 7 -	742 716 426	3,366 3,265 4101	649 623 426	1,426 1,375 51	2,915 2,814 101	9,321 8,793 528	14,505 4,444 161	212,699 12,110 2589	(NA) 1,127 (NA)	743 727 416	8,979 8,546 433
	Clay and related minerals..... Included in manufactures.....	28 24	1 -	98 470	439 4334	95 470	197 143	421 334	972 809	1614 1391	21,583 21,200	(NA) (NA)	(NA) (NA)	(NA) (NA)
	Misc. nonmetallic minerals.....	7	4	4116	4517	4114	232	515	5,330	1587	25,898	(NA)	(NA)	(NA)
14	Missouri..... Mineral industries..... Included in manufactures.....	416 345 71	63 54 9	4,880 3,863 41,017	22,991 18,408 44,583	4,256 3,311 4945	9,051 7,081 1,970	19,305 15,203 4,102	60,679 46,120 14,559	129,517 24,661 14,856	281,300 62,052 219,248	38,896 8,729 3167	104,868 103,991 4877	1047,502 1035,596 11,906
142	Crushed and broken stone..... Mineral industry..... Included in manufactures.....	182 171 11	43 36 7	2,824 2,482 4342	14,003 12,222 41,781	2,468 2,126 4342	5,330 4,647 683	11,790 10,009 1,781	35,563 27,081 8,482	116,973 15,624 11,349	246,648 36,817 29,831	(NA) 5,888 4384	2,350 1,966 4384	26,963 18,725 8,238
144	Sand and gravel..... Mineral industry..... Included in manufactures.....	106 93 13	9 9 -	700 679 421	3,585 3,512 473	583 562 421	1,231 1,190 41	3,027 2,954 73	10,442 9,830 612	14,359 4,262 197	213,077 12,368 2709	(NA) 1,724 (NA)	807 788 419	(NA) 6,307 (NA)
	Clay and related minerals.....	70	2	4301	41,334	41,282	532	1,206	5,208	12,080	26,746	(NA)	(NA)	(NA)
147	Chemical and fertilizer minerals (Barite).....	17	5	11371	111,305	333	698	1,179	3,779	2,719	6,184	314	(NA)	(NA)
148	Nonmetallic minerals services..	26	-	92	314	88	166	303	1,169	428	1,381	216	(NA)	(NA)
	North Dakota: Included in manufactures.....	4	-	418	474	418	37	74	373	164	2387	(NA)	412	123
144	Sand and gravel: Mineral industry.....	40	4	237	1,249	207	454	1,099	2,576	1,587	3,768	595	(NA)	(NA)
	South Dakota: Included in manufactures.....	10	3	4172	4857	4145	309	660	1,692	1591	22,229	354	4173	1,111
144	Sand and gravel..... Mineral industry.....	72 67	4 4	4320 309	41,371 1,327	4286 275	664 642	1,259 1,215	2,702 2,451	11,909 1,882	24,070 3,792	(NA) 541	(NA) (NA)	(NA) (NA)
145	Clay and related minerals (mineral industry).....	11	3	137	700	116	334	630	3,027	1,178	4,062	143	(NA)	(NA)

See footnotes at end of table.



TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958—Con.

Ind. code	Industry group and geographic area	1963											1958	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of materials, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages						
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
14	West North Central—Continued													
	Nebraska <sup>1</sup> .....	200	11	1,264	6,097	1,056	2,465	4,956	12,924	17,550	218,584	31,890	1,095	11,128
	Mineral industries <sup>2</sup> .....	191	10	1,192	5,700	984	2,321	4,559	11,624	7,331	17,065	1,890	996	9,294
	Included in manufactures....	9	1	472	2,397	472	144	397	1,300	219	21,519	(NA)	499	1,834
142	Crushed and broken stone: Mineral industry(limestone).	24	5	290	1,507	259	631	1,275	2,855	2,728	5,145	438	280	3,327
144	Sand and gravel: Mineral industry.....	162	5	887	4,152	714	1,668	3,248	8,669	4,543	11,786	1,426	705	5,945
14	Kansas.....	266	23	1,842	8,943	1,579	3,367	7,378	22,747	10,317	230,430	32,634	1,824	22,554
	Mineral industries.....	223	20	1,570	7,955	1,315	2,836	6,416	17,435	9,364	24,187	2,612	1,531	16,019
	Included in manufactures....	43	3	272	988	264	531	962	5,312	1,953	26,243	222	293	6,535
142	Crushed and broken stone.....	93	13	918	4,398	846	1,898	3,925	11,638	15,470	215,738	(NA)	901	11,656
	Mineral industry.....	84	11	797	4,021	725	1,656	3,548	9,017	5,159	12,806	1,370	796	8,562
	Included in manufactures....	9	2	121	377	121	242	377	2,621	1,311	22,932	(NA)	4105	3,094
144	Sand and gravel.....	136	6	601	2,850	494	997	2,399	6,987	13,627	29,439	(NA)	559	6,321
	Mineral industry.....	128	6	580	2,763	473	956	2,312	6,504	3,581	8,910	1,175	512	5,306
	Included in manufactures....	8	-	21	87	21	41	87	483	146	2,529	(NA)	447	1,015
14	South Atlantic.....	1,159	337	25,776	119,185	22,031	48,387	95,242	344,897	198,535	2498,188	345,244	25,139	259,177
	Mineral industries.....	902	302	22,544	106,241	19,012	42,470	83,433	311,376	185,726	452,582	44,520	22,389	229,402
	Included in manufactures....	257	35	3,232	12,944	43,019	5,917	11,809	33,521	12,809	245,606	3724	42,750	29,775
141	Dimension stone.....	68	22	2,046	7,387	1,816	3,520	6,182	10,974	7,185	17,340	819	1,978	8,302
	Mineral industry.....	32	4	276	824	259	511	754	1,359	638	1,902	95	429	1,809
	Included in manufactures....	36	18	1,770	6,563	1,557	3,009	5,428	9,615	6,547	15,438	724	1,549	6,493
142	Crushed and broken stone.....	388	180	9,796	45,621	8,560	19,166	36,779	132,406	166,379	2185,505	(NA)	8,592	93,924
	Mineral industry.....	343	165	8,997	42,017	7,761	17,569	33,175	119,744	61,906	168,370	13,280	8,180	84,591
	Included in manufactures....	45	15	799	3,604	799	1,597	3,604	12,662	4,473	17,135	(NA)	412	9,333
144	Sand and gravel.....	433	55	4,572	21,138	3,770	8,519	16,837	55,669	24,567	272,679	(NA)	4,422	49,395
	Mineral industry.....	357	55	4,366	20,259	3,564	8,106	15,958	51,869	24,110	68,422	7,557	4,193	43,522
	Included in manufactures....	76	-	206	879	206	413	879	3,800	1457	24,257	(NA)	1229	5,873
145	Clay and related minerals: Mineral industry.....	63	41	4,249	20,983	3,671	7,737	17,001	59,311	29,494	80,680	8,125	(NA)	(NA)
147	Chemical and fertilizer minerals.....	40	26	3,557	18,075	2,796	6,580	13,063	69,854	65,686	120,980	14,560	3,753	51,916
148	Nonmetallic minerals services.	14	1	110	452	101	201	409	818	380	1,131	67	362	1,052
149	Misc. nonmetallic minerals: Mineral industry.....	53	10	989	3,631	860	1,766	3,073	8,421	3,512	11,097	836	(NA)	(NA)
14	Delaware, Maryland, and District of Columbia.....	137	32	2,350	12,172	2,006	4,370	9,504	35,289	15,362	246,798	33,853	1,930	23,220
	Mineral industries.....	109	28	1,944	10,677	1,600	3,560	8,009	30,765	13,517	40,438	3,844	1,728	18,314
	Included in manufactures....	28	4	406	1,495	406	810	1,495	4,524	1,845	26,360	39	202	4,906
142	Crushed and broken stone.....	34	18	995	5,252	848	1,807	3,737	15,181	18,327	222,337	(NA)	868	11,325
	Mineral industry.....	28	15	755	4,463	608	1,327	2,948	13,293	6,869	18,991	1,171	815	9,134
	Included in manufactures (Maryland).....	6	3	240	789	240	480	789	1,888	1,458	3,346	(NA)	453	2,191
144	Sand and gravel.....	78	13	4,223	46,402	4,035	2,318	5,313	17,689	16,373	222,316	(NA)	4869	10,036
	Delaware.....	15	-	469	2,341	462	139	310	935	1497	21,280	(NA)	(NA)	(NA)
	Maryland.....	63	13	4,154	46,061	4973	2,179	5,003	16,754	15,876	221,036	(NA)	(NA)	(NA)
	Mineral industry.....	67	13	1,109	5,891	921	2,090	4,802	15,876	6,157	20,287	1,746	808	8,208
144	Delaware.....	11	-	53	259	46	106	228	435	444	727	152	60	599
	Maryland.....	56	13	1,056	5,632	875	1,984	4,574	15,441	5,713	19,560	1,594	748	7,609
	Included in manufactures....	11	-	114	211	114	228	511	1,813	216	2,029	(NA)	461	1,828
	Delaware.....	4	-	416	82	416	33	82	500	253	2,553	(NA)	(NA)	(NA)
144	Maryland.....	7	-	498	4429	498	195	429	1,313	1163	21,476	(NA)	(NA)	(NA)
	Clay and related minerals.....	13	-	443	4,175	443	80	175	1,563	239	2,998	(NA)	479	1,004

See footnotes at end of table.



TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958—Con.

Ind. code	Industry group and geographic area	1963										1958		
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of materials, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures	All employees	Value added in mining
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages						
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)					(\$1,000)	(\$1,000)
14	South Atlantic—Continued													
	Virginia.....	198	78	4,297	18,494	3,746	8,103	15,376	48,472	122,663	265,789	35,346	4,106	36,825
	Mineral industries.....	157	69	3,703	16,038	3,179	6,961	13,023	41,528	20,802	57,168	5,162	3,520	29,726
	Included in manufactures.....	41	9	1,594	2,456	4567	1,142	2,353	6,944	11,861	28,621	1,184	1,586	7,099
142	Dimension stone.....	8	2	190	623	161	330	512	1,239	553	1,606	186	(NA)	(NA)
	Crushed and broken stone.....	105	56	2,559	11,256	2,237	4,998	9,153	31,923	13,928	242,710	(NA)	2,031	19,744
	Mineral industry.....	95	50	2,326	10,142	2,004	4,533	8,039	28,809	13,009	38,677	3,141	1,839	15,526
	Included in manufactures.....	10	6	223	41,114	233	465	1,114	3,114	919	24,033	(NA)	1,192	4,218
144	Sand and gravel.....	56	12	784	3,731	702	1,455	3,270	8,947	15,922	213,221	(NA)	(NA)	(NA)
	Mineral industry.....	50	12	760	3,633	678	1,407	3,172	8,407	5,882	12,641	1,648	848	9,034
	Included in manufactures.....	6	-	24	498	24	48	98	540	140	2580	(NA)	(NA)	(NA)
	Clay and related minerals:													
145	Mineral industries.....	7	5	218	967	159	355	651	2,110	1,245	3,067	288	(NA)	(NA)
14	West Virginia.....	74	20	1,429	7,682	1,160	2,351	5,797	19,757	17,271	225,498	(NA)	1,443	16,559
	Mineral industries.....	61	18	1,296	6,933	1,027	2,084	5,048	16,410	6,491	21,371	1,530	1,331	15,249
	Included in manufactures.....	13	2	133	4749	133	267	749	3,347	1780	24,127	(NA)	1,112	1,310
	Crushed and broken stone:													
142	Mineral industry.....	37	9	593	2,995	496	961	2,374	7,030	3,620	10,100	550	683	6,790
144	Sand and gravel:													
	Mineral industry.....	20	8	656	3,794	491	1,067	2,552	9,112	2,671	10,851	932	620	8,312
	Clay and related minerals.....	5	2	486	4,407	482	140	393	1,746	1352	2,068	(NA)	492	586
142	North Carolina:													
	Dimension stone.....	11	3	402	1,360	362	642	1,134	1,676	997	2,571	102	495	2,182
	Crushed and broken stone:													
	Mineral industry.....	52	25	1,135	4,750	962	1,981	3,530	16,481	8,407	23,729	1,159	1,120	10,394
144	Sand and gravel.....	76	6	535	2,115	485	1,237	1,904	6,697	12,457	28,557	(NA)	(NA)	(NA)
	Mineral industry.....	61	6	514	2,029	464	1,194	1,818	6,210	2,403	8,016	597	486	4,324
	Included in manufactures.....	15	-	21	486	21	43	86	487	154	2541	(NA)	(NA)	(NA)
	Clay and related minerals.....	47	5	383	1,475	358	734	1,377	4,672	13,048	26,603	(NA)	(NA)	(NA)
145	Mineral industries.....	13	5	275	1,109	250	525	1,011	3,203	2,730	4,816	1,117	531	4,098
	Included in manufactures.....	34	-	108	366	108	209	366	1,469	1318	2,1787	(NA)	(NA)	(NA)
149	Misc. nonmetallic minerals.....	25	7	417	1,725	360	773	1,391	3,603	1,979	5,077	505	(NA)	(NA)
142	South Carolina:													
	Crushed and broken stone:													
	Mineral industry.....	18	13	728	2,734	639	1,402	2,301	9,274	3,891	12,139	1,026	510	4,176
144	Sand and gravel.....	40	4	4342	4,1438	4309	794	1,273	3,458	11,966	24,808	(NA)	4307	3,343
	Mineral industry.....	33	4	340	1,431	307	790	1,266	3,407	1,961	4,752	616	304	3,246
145	Clay and related minerals:													
	Mineral industries.....	6	6	452	2,099	408	900	1,681	4,759	3,098	7,273	584	(NA)	(NA)
149	Misc. nonmetallic minerals.....	5	1	93	323	78	147	224	1,244	511	1,652	103	(NA)	(NA)
14	Georgia.....	196	75	6,846	31,866	5,993	12,787	26,252	82,520	144,839	2117,799	39,560	6,074	57,188
	Mineral industries.....	144	61	5,518	26,616	4,814	10,448	21,826	74,402	39,529	104,801	9,130	5,093	51,162
	Included in manufactures.....	52	14	1,328	45,290	4,179	2,339	4,426	8,118	15,310	212,998	3,430	4,981	6,026
	Dimension stone.....	39	16	1,367	5,126	1,213	2,388	4,291	7,475	5,406	12,401	480	1,106	4,751
141	Mineral industry.....	15	3	140	392	135	244	381	582	378	910	50	266	1,147
	Included in manufactures.....	24	13	1,227	4,734	1,078	2,144	3,910	6,893	5,028	11,491	430	840	3,604
	Crushed and broken stone:													
142	Mineral industry.....	37	30	1,789	8,339	1,602	3,725	7,034	23,166	15,718	35,578	3,306	1,424	17,898
144	Sand and gravel.....	62	5	4361	4,1231	4299	641	953	3,149	11,719	24,211	(NA)	(NA)	(NA)
	Mineral industry.....	50	5	354	1,204	292	627	926	2,995	1,702	4,040	657	463	3,776
145	Clay and related minerals:													
	Mineral industries.....	27	20	2,966	15,527	2,555	5,344	12,603	44,415	20,511	60,141	4,785	2,672	26,149
149	Misc. nonmetallic minerals.....	8	1	104	369	96	194	293	1,111	389	1,440	60	(NA)	(NA)

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958—Con.

Ind. code	Industry group and geographic area	1963											1958	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of materials, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages						
14	South Atlantic—Continued													
	Florida.....	242	59	6,089	29,616	4,922	11,668	22,447	103,739	<sup>1</sup> 79,743	<sup>2</sup> 165,496	(NA)	(NA)	(NA)
	Mineral industry.....	202	56	5,913	28,802	4,746	11,316	21,633	98,230	78,538	158,782	17,986	(NA)	(NA)
	Included in manufactures.....	40	3	<sup>2</sup> 176	<sup>4</sup> 814	<sup>2</sup> 176	352	814	5,509	<sup>1</sup> 1,205	<sup>2</sup> 6,714	(NA)	<sup>4</sup> 227	4,784
142	Crushed and broken stone (limestone).....	94	26	1,817	9,279	1,596	3,932	7,634	26,582	<sup>1</sup> 11,483	<sup>2</sup> 35,138	(NA)	(NA)	(NA)
	Mineral industry.....	76	23	1,671	8,594	1,450	3,640	6,949	21,691	10,392	29,156	2,927	1,789	20,673
	Included in manufactures.....	18	3	<sup>2</sup> 146	<sup>4</sup> 685	<sup>2</sup> 146	292	685	4,891	<sup>1</sup> 1,091	<sup>2</sup> 5,982	(NA)	(NA)	(NA)
144	Sand and gravel: Mineral industry.....	76	7	633	2,277	411	931	1,422	5,862	3,334	7,835	1,361	664	6,622
145	Clay and related minerals: Mineral industries.....	6	4	292	1,163	257	558	951	3,807	1,689	4,979	517	(NA)	(NA)
1475	Chemical and fertilizer minerals (phosphate rock)....	28	21	3,219	16,410	2,540	6,010	11,997	66,121	62,839	<sup>12</sup> 119,016	<sup>12</sup> 14,174	(NA)	(NA)
148	Nonmetallic minerals services..	7	1	63	236	56	109	208	437	177	599	15	(NA)	(NA)
14	East South Central.....	654	185	11,229	48,445	9,828	21,334	40,766	143,125	<sup>1</sup> 74,029	<sup>2</sup> 195,992	<sup>3</sup> 21,162	11,606	104,530
	Mineral industries.....	539	164	9,724	42,602	8,424	18,585	35,245	127,105	68,149	174,812	20,442	9,934	83,945
	Included in manufactures.....	115	21	<sup>4</sup> 1,505	<sup>4</sup> 5,843	<sup>4</sup> 1,404	2,749	5,521	16,020	<sup>1</sup> 5,880	<sup>2</sup> 21,180	<sup>3</sup> 720	<sup>4</sup> 1,672	20,585
141	Dimension stone.....	37	9	999	2,999	883	1,661	2,636	3,982	2,832	6,044	770	1,277	6,076
	Mineral industry.....	26	3	242	569	227	377	528	1,025	263	1,238	50	304	1,306
	Included in manufactures.....	11	6	757	2,430	656	1,284	2,108	2,957	2,569	4,806	720	973	4,770
142	Crushed and broken stone.....	246	102	5,031	21,905	4,446	9,993	18,390	71,544	<sup>1</sup> 31,524	<sup>2</sup> 91,637	(NA)	4,487	45,548
	Mineral industry.....	223	93	4,629	19,776	4,044	9,189	16,261	63,162	29,367	81,098	11,431	4,043	37,868
	Included in manufactures.....	23	9	<sup>4</sup> 402	<sup>2</sup> 1,129	<sup>4</sup> 402	804	2,129	8,382	<sup>1</sup> 2,157	<sup>2</sup> 10,539	(NA)	<sup>4</sup> 444	7,680
144	Sand and gravel.....	213	39	2,419	10,293	2,037	4,614	8,501	25,172	<sup>1</sup> 12,818	<sup>2</sup> 34,577	(NA)	2,100	19,540
	Mineral industry.....	187	36	2,305	9,851	1,923	4,388	8,059	23,160	12,550	32,297	3,413	2,030	17,848
	Included in manufactures.....	26	3	<sup>2</sup> 114	<sup>4</sup> 442	<sup>2</sup> 114	226	442	2,012	<sup>1</sup> 268	<sup>2</sup> 2,280	(NA)	<sup>4</sup> 70	1,692
145	Clay and related minerals.....	106	19	996	4,075	887	1,833	3,276	13,749	<sup>1</sup> 7,109	<sup>2</sup> 19,280	(NA)	4,008	16,637
	Mineral industries.....	51	16	764	3,233	655	1,398	2,434	11,080	6,223	15,725	1,578	3,380	9,400
	Included in manufactures.....	55	3	<sup>4</sup> 232	<sup>4</sup> 842	<sup>4</sup> 232	435	842	2,669	<sup>1</sup> 886	<sup>2</sup> 3,555	(NA)	<sup>4</sup> 628	7,237
147	Chemical and fertilizer minerals.....	36	13	1,550	8,280	1,369	2,812	7,246	26,232	18,346	41,172	3,406	(NA)	(NA)
148	Nonmetallic minerals services..	10	2	118	477	96	202	355	1,027	886	1,713	200	73	455
149	Misc. nonmetallic minerals.....	6	1	116	416	110	219	362	1,419	514	1,569	364	(NA)	(NA)
14	Kentucky.....	199	60	3,105	13,588	2,672	5,935	11,015	42,454	<sup>1</sup> 18,995	<sup>2</sup> 54,904	(NA)	<sup>2</sup> 718	24,196
	Mineral industries.....	174	59	2,999	13,116	2,566	5,727	10,543	40,106	18,494	52,058	6,542	<sup>13</sup> 2,682	<sup>13</sup> 23,144
	Included in manufactures.....	25	1	<sup>4</sup> 106	<sup>4</sup> 472	<sup>4</sup> 106	208	472	2,348	<sup>1</sup> 501	<sup>2</sup> 2,846	(NA)	<sup>4</sup> 36	1,052
142	Crushed and broken stone: Mineral industry (limestone)..	108	47	2,159	9,291	1,872	4,218	7,504	30,142	12,001	37,151	4,992	1,801	15,478
144	Sand and gravel.....	42	5	<sup>4</sup> 400	<sup>4</sup> 2,067	<sup>4</sup> 312	788	1,611	5,724	<sup>1</sup> 2,993	<sup>2</sup> 7,870	(NA)	(NA)	(NA)
	Mineral industry.....	33	5	387	2,015	299	762	1,559	5,424	2,961	7,538	847	362	3,713
145	Clay and related minerals.....	26	4	207	992	186	392	790	3,218	<sup>1</sup> 1,501	<sup>2</sup> 4,317	(NA)	385	3,648
	Mineral industries.....	15	4	162	816	141	305	614	2,606	<sup>1</sup> 313	<sup>2</sup> 3,517	402	(NA)	(NA)
	Included in manufactures.....	11	-	<sup>4</sup> 45	<sup>4</sup> 176	<sup>4</sup> 45	87	176	612	<sup>1</sup> 188	<sup>2</sup> 800	(NA)	(NA)	(NA)
14	Tennessee.....	222	68	4,733	21,255	4,158	8,905	17,844	64,220	<sup>1</sup> 34,697	<sup>2</sup> 91,152	<sup>3</sup> 7,765	5,932	47,197
	Mineral industries.....	197	61	4,058	18,991	3,554	7,753	15,802	59,657	32,597	84,641	7,613	4,984	39,755
	Included in manufactures.....	25	7	<sup>4</sup> 675	<sup>4</sup> 2,264	<sup>4</sup> 604	1,152	2,042	4,563	<sup>1</sup> 2,100	<sup>2</sup> 6,511	<sup>3</sup> 152	<sup>4</sup> 948	7,442
142	Dimension stone.....	28	7	757	2,030	671	1,217	1,767	2,455	1,887	4,140	202	997	4,172
	Crushed and broken stone.....	89	31	1,578	6,637	1,385	3,182	5,458	23,594	<sup>1</sup> 9,679	<sup>2</sup> 30,163	(NA)	1,610	16,363
	Mineral industry.....	83	30	1,495	6,149	1,302	3,017	4,970	21,636	9,372	27,898	3,110	1,436	14,246
144	Sand and gravel.....	57	13	706	3,367	632	1,379	2,807	8,379	<sup>1</sup> 4,045	<sup>2</sup> 11,482	(NA)	658	6,282
	Mineral industry.....	52	11	655	3,165	581	1,278	2,605	7,580	3,971	10,609	942	611	5,204
	Included in manufactures.....	5	2	<sup>4</sup> 51	<sup>4</sup> 202	<sup>4</sup> 51	101	202	799	<sup>1</sup> 74	<sup>2</sup> 873	(NA)	<sup>4</sup> 47	1,078
145	Clay and related minerals: Mineral industries.....	11	6	319	1,422	264	569	1,042	4,289	2,102	6,133	258	332	3,633

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958—Con.

Ind. code	Industry group and geographic area	1963										1958		
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of materials, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages						
14	East South Central—Continued													
	Alabama.....	146	41	2,420	10,056	2,171	4,653	8,876	27,056	<sup>1</sup> 15,353	<sup>2</sup> 36,714	<sup>3</sup> 5,695	2,059	23,713
	Mineral industries.....	101	30	<sup>1</sup> 803	7,367	<sup>1</sup> 584	3,463	6,287	19,377	12,582	26,829	<sup>5</sup> 130	<sup>1</sup> 415	12,514
142	Included in manufactures.....	45	11	<sup>4</sup> 617	<sup>4</sup> 2,689	<sup>4</sup> 587	1,190	2,589	7,679	<sup>1</sup> 2,771	<sup>2</sup> 9,885	<sup>5</sup> 565	<sup>1</sup> 644	11,199
	Crushed and broken stone.....	44	23	1,222	5,590	1,117	2,449	5,041	15,733	<sup>1</sup> 9,400	<sup>2</sup> 21,804	(NA)	(NA)	(NA)
	Mineral industry.....	32	16	975	4,336	870	1,954	3,787	11,384	7,994	16,049	3,329	(NA)	(NA)
144	Included in manufactures.....	12	7	<sup>4</sup> 247	<sup>4</sup> 1,254	<sup>4</sup> 247	495	1,254	4,349	<sup>1</sup> 1,406	<sup>2</sup> 5,755	(NA)	(NA)	(NA)
	Sand and gravel.....	60	12	658	2,398	558	1,195	2,028	6,138	<sup>1</sup> 2,750	<sup>2</sup> 8,012	(NA)	(NA)	(NA)
	Mineral industry.....	49	11	612	2,226	512	1,104	1,856	5,285	2,596	7,005	876	391	2,989
145	Included in manufactures.....	11	1	<sup>4</sup> 46	<sup>4</sup> 172	<sup>4</sup> 46	91	172	853	<sup>1</sup> 154	<sup>2</sup> 1,007	(NA)	(NA)	(NA)
	Clay and related minerals:													
	Mineral industries.....	12	2	90	343	81	164	249	1,172	1,402	2,048	526	(NA)	(NA)
14	Mississippi.....	87	16	971	3,546	827	1,841	3,017	9,395	<sup>1</sup> 4,984	<sup>2</sup> 13,222	(NA)	897	9,553
	Mineral industries.....	67	14	864	3,128	720	1,642	2,599	7,965	4,476	11,284	1,157	853	8,661
	Included in manufactures.....	20	2	<sup>4</sup> 107	<sup>4</sup> 418	<sup>4</sup> 107	199	418	1,430	<sup>1</sup> 508	<sup>2</sup> 1,938	(NA)	<sup>4</sup> 44	892
144	Sand and gravel:													
	Mineral industry.....	53	9	651	2,445	531	1,244	2,039	4,871	3,022	7,145	748	666	5,942
	Clay and related minerals.....	30	6	<sup>4</sup> 269	<sup>4</sup> 901	<sup>4</sup> 245	497	778	3,723	<sup>1</sup> 1,723	<sup>2</sup> 5,054	(NA)	(NA)	(NA)
14	West South Central.....	856	179	14,178	71,439	11,455	25,277	53,681	249,452	<sup>1</sup> 94,254	<sup>2</sup> 322,720	<sup>3</sup> 20,986	14,543	214,841
	Mineral industries.....	664	160	12,782	65,436	10,140	22,557	47,897	221,701	87,603	288,371	20,933	13,086	187,359
	Included in manufactures.....	192	19	<sup>4</sup> 1,396	<sup>4</sup> 6,003	<sup>4</sup> 1,315	2,720	5,784	27,751	<sup>1</sup> 6,651	<sup>2</sup> 34,349	<sup>3</sup> 53	<sup>4</sup> 1,457	27,482
141	Dimension stone.....	42	8	498	1,876	405	866	1,625	3,279	2,549	5,627	201	518	2,678
	Mineral industry.....	29	4	210	717	198	435	685	1,317	868	2,037	148	188	963
	Included in manufactures.....	13	4	288	1,159	207	431	940	1,962	1,681	3,590	53	330	1,715
142	Crushed and broken stone.....	129	55	3,375	16,378	2,962	6,779	13,726	49,372	<sup>1</sup> 25,441	<sup>2</sup> 68,397	(NA)	2,762	29,529
	Mineral industry.....	100	49	3,018	14,721	2,605	6,065	12,069	37,442	<sup>2</sup> 3,838	<sup>3</sup> 54,864	6,416	<sup>2</sup> 372	19,750
	Included in manufactures.....	29	6	<sup>4</sup> 357	<sup>4</sup> 1,657	<sup>4</sup> 357	714	1,657	11,930	<sup>1</sup> 1,603	<sup>2</sup> 13,533	(NA)	<sup>4</sup> 390	9,779
144	Sand and gravel.....	475	74	4,664	19,376	3,952	8,927	16,241	51,545	<sup>1</sup> 27,591	<sup>2</sup> 71,405	(NA)	4,782	48,866
	Mineral industry.....	423	71	4,494	18,749	3,782	8,587	15,614	47,677	26,924	66,870	7,731	4,414	43,376
	Included in manufactures.....	52	3	<sup>4</sup> 170	<sup>4</sup> 627	<sup>4</sup> 170	340	627	3,868	<sup>1</sup> 667	<sup>2</sup> 4,535	(NA)	<sup>4</sup> 368	5,490
145	Clay and related minerals:													
	Mineral industries.....	40	7	388	1,788	318	700	1,389	4,031	3,137	6,676	492	(NA)	(NA)
147	Chemical and fertilizer													
	minerals.....	29	23	4,158	27,261	2,806	5,894	16,474	126,382	29,321	150,706	4,997	4,804	114,252
149	Misc. nonmetallic minerals:													
	Mineral industries.....	34	6	479	2,113	396	817	1,579	4,661	3,464	6,986	1,139	(NA)	(NA)
14	Arkansas.....	134	26	2,025	9,366	1,793	3,940	8,167	27,487	<sup>1</sup> 16,855	<sup>2</sup> 41,394	<sup>3</sup> 2,948	<sup>14</sup> 1,680	<sup>14</sup> 15,428
	Mineral industries.....	104	24	1,831	8,515	1,601	3,568	7,323	23,773	<sup>1</sup> 5,876	<sup>2</sup> 36,703	2,946	<sup>14</sup> 1,347	<sup>14</sup> 11,499
	Included in manufactures.....	30	2	<sup>4</sup> 194	<sup>4</sup> 851	<sup>4</sup> 192	372	844	3,714	<sup>1</sup> 979	<sup>2</sup> 4,691	<sup>3</sup> 2	<sup>14</sup> 433	3,929
144	Dimension stone.....	12	3	95	228	88	152	216	362	213	537	38	142	465
	Sand and gravel.....	65	7	<sup>4</sup> 478	<sup>4</sup> 2,003	<sup>4</sup> 434	977	1,778	4,817	<sup>1</sup> 3,027	<sup>2</sup> 6,689	(NA)	(NA)	(NA)
	Mineral industry.....	57	7	466	1,966	422	953	1,741	4,547	3,001	6,393	1,155	389	2,845
145	Clay and related minerals.....	18	1	136	640	136	265	640	1,481	<sup>1</sup> 774	<sup>2</sup> 2,248	(NA)	(NA)	(NA)
	Mineral industries.....	3	-	15	88	15	33	88	305	226	524	7	(NA)	(NA)
	Included in manufactures.....	15	1	<sup>4</sup> 121	<sup>4</sup> 552	<sup>4</sup> 121	232	552	1,176	<sup>1</sup> 548	<sup>2</sup> 1,724	(NA)	(NA)	(NA)
149	Misc. nonmetallic minerals:													
	Mineral industries.....	7	1	39	195	35	74	172	442	174	515	101	(NA)	(NA)
14	Louisiana.....	121	35	3,344	18,537	2,565	5,571	13,005	83,367	<sup>1</sup> 25,517	<sup>2</sup> 102,450	(NA)	3,763	69,926
	Mineral industries.....	102	35	3,309	18,365	2,530	5,498	12,833	82,821	<sup>2</sup> 25,238	<sup>3</sup> 101,625	6,434	3,738	69,570
	Included in manufactures.....	19	-	<sup>4</sup> 35	<sup>4</sup> 172	<sup>4</sup> 35	73	172	546	<sup>1</sup> 279	<sup>2</sup> 825	(NA)	<sup>4</sup> 25	356
144	Sand and gravel.....	97	23	<sup>4</sup> 1,212	<sup>4</sup> 4,572	<sup>4</sup> 993	2,260	3,868	12,368	<sup>1</sup> 7,898	<sup>2</sup> 18,204	(NA)	(NA)	(NA)
	Mineral industry.....	87	23	1,205	4,545	986	2,246	3,841	12,214	7,881	18,033	2,062	1,223	11,684
	Clay and related minerals, (clay													
147	and related minerals, n.e.c.)	11	1	485	4561	474	157	438	931	<sup>1</sup> 619	<sup>2</sup> 1,512	(NA)	492	840
	Chemical and fertilizer	10	10	1,954	13,062	1,414	2,969	8,389	69,512	16,168	81,454	4,226	(NA)	(NA)
	minerals.....													

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958—Con.

Ind. code	Industry group and geographic area	1963										1958				
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of materials, etc., and purchased machinery installed	Value of shipments and receipts	Capital expendi- tures	All employees	Value added in mining		
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages								
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)			
14	West South Central—Continued															
	Oklahoma.....	139	21	1,421	6,561	1,204	2,764	5,334	19,266	17,224	224,444	2,046	151,449	1512,646		
	Mineral industries.....	111	20	1,265	5,862	1,050	2,462	4,642	15,006	6,594	19,560	2,040	151,228	159,717		
	Included in manufactures....	28	1	156	699	154	302	692	4,260	1630	24,884	6	4221	2,929		
	Dimension stone.....	13	-	49	145	46	74	137	660	142	773	29	97	447		
142	Crushed and broken stone.....	37	15	798	3,856	671	1,530	3,150	10,325	14,332	213,524	(NA)	(NA)	(NA)		
	Mineral industry.....	32	15	766	3,681	639	1,466	2,975	8,655	4,047	11,569	1,133	780	5,362		
	Included in manufactures....	5	-	432	1,175	432	64	175	1,670	1,285	21,955	(NA)	(NA)	(NA)		
		Sand and gravel.....	61	5	406	1,697	355	887	1,463	5,510	12,029	26,772	(NA)	(NA)	(NA)	
144	Mineral industry.....	56	5	385	1,613	334	845	1,379	5,038	1,976	6,247	767	333	3,278		
	Included in manufactures....	5	-	421	484	421	42	84	472	153	525	(NA)	(NA)	(NA)		
		Clay and related minerals: Mineral industries.....	5	-	26	125	25	63	125	417	282	616	83	(NA)	(NA)	
	14	Texas.....	462	97	7,388	36,975	5,893	13,002	27,175	119,332	144,658	2154,432	39,558	7,620	115,451	
Mineral industries.....		347	81	6,377	32,694	4,959	11,029	23,099	100,101	39,895	130,483	9,513	6,742	94,683		
Included in manufactures....		115	16	1,011	4,281	934	1,973	4,076	19,231	14,763	223,949	345	4878	20,768		
		Dimension stone.....	17	5	354	1,503	271	640	1,272	2,257	2,194	4,317	134	279	1,785	
141	Mineral industry.....	11	2	110	477	104	282	451	588	682	1,181	89	100	556		
	Included in manufactures....	6	3	244	1,026	167	358	821	1,669	1,512	3,136	45	179	1,229		
		Crushed and broken stone.....	64	29	1,623	7,721	1,460	3,317	6,464	22,073	10,393	228,626	(NA)	1,466	(D)	
		Mineral industry.....	44	23	1,335	6,445	1,172	2,742	5,188	13,833	9,346	19,339	3,840	1,191	11,122	
142	Included in manufactures....	20	6	288	1,276	288	575	1,276	8,240	1,047	29,287	(NA)	4275	(D)		
		Sand and gravel.....	252	39	2,568	11,104	2,170	4,803	9,132	28,850	14,637	239,740	(NA)	2,653	28,123	
		Mineral industry.....	223	36	2,438	10,625	2,040	4,543	8,653	25,878	14,066	36,197	3,747	2,469	25,569	
		Included in manufactures....	29	3	130	479	130	260	479	2,972	1571	23,543	(NA)	1484	2,554	
145		Clay and related minerals: Mineral industries.....	29	6	280	1,101	222	481	825	2,554	2,266	4,456	364	309	2,530	
		Misc. nonmetallic minerals: Mineral industries.....	18	4	351	1,579	287	585	1,151	3,708	2,313	5,114	907	(NA)	(NA)	
	14	Mountain.....	853	91	11,769	70,404	9,963	20,002	56,932	208,386	197,289	2268,387	37,288	10,688	175,119	
		Mineral industries.....	705	84	10,674	64,818	8,887	17,850	51,429	180,480	92,484	235,725	37,239	9,840	150,575	
Included in manufactures....		148	7	1,095	4,586	1,076	2,152	5,503	27,906	14,805	232,662	349	4848	24,544		
		Dimension stone.....	37	2	197	668	170	290	569	1,047	468	1,437	78	116	694	
141	Mineral industry.....	21	1	97	223	89	135	207	369	151	491	29	(NA)	(NA)		
	Included in manufactures....	16	1	100	445	81	155	362	678	317	946	49	(NA)	(NA)		
		Crushed and broken stone.....	107	10	923	4,757	834	1,623	4,443	15,095	15,164	219,274	(NA)	1,062	17,318	
		Mineral industry.....	82	8	646	3,055	557	1,069	2,741	7,841	13,432	10,288	985	874	10,371	
142	Included in manufactures....	25	2	277	1,702	277	554	1,702	7,254	1,732	28,986	(NA)	4188	6,947		
		Sand and gravel.....	412	28	2,998	14,735	2,737	5,391	13,219	43,370	16,305	255,418	(NA)	2,346	43,303	
		Mineral industry.....	342	25	2,428	12,007	2,167	4,240	10,491	28,213	14,263	38,219	4,257	1,869	30,507	
		Included in manufactures....	70	3	4570	42,728	4570	1,151	2,728	15,157	12,042	217,199	(NA)	4777	12,796	
145		Clay and related minerals: Mineral industries.....	61	11	824	4,753	703	1,484	4,014	11,970	8,041	19,307	704	670	12,863	
		Chemical and fertilizer minerals.....	62	22	5,383	37,331	4,202	8,452	27,379	113,103	55,762	140,802	28,063	5,039	81,849	
	1481	Nonmetallic minerals services.	18	5	267	1,955	255	522	1,897	3,638	2,148	5,224	562	(NA)	(NA)	
			Misc. nonmetallic minerals: Mineral industries.....	119	12	1,029	5,494	914	1,948	4,700	15,346	8,687	21,394	2,639	1,075	12,448
14		Montana.....	82	4	937	(16)	847	(16)	(16)	(16)	(16)	(16)	(NA)	767	11,318	
		Mineral industries.....	71	4	908	(16)	818	(16)	(16)	(16)	(16)	(16)	(NA)	725	10,257	
	Included in manufactures....	11	-	429	4157	429	56	157	1,061	123	21,184	(NA)	442	1,061		
		Crushed and broken stone: Mineral industry.....	8	-	41	212	31	54	164	635	268	785	118	(NA)	(NA)	
142		Sand and gravel.....	47	-	4191	4914	4175	348	857	2,176	1,277	2,942	(NA)	4202	3,664	
		Mineral industry.....	43	-	185	881	169	336	824	2,036	1,258	2,783	511	192	3,467	
	147		Chemical and fertilizer minerals.....	6	3	477	3,027	424	900	2,623	4,563	5,628	5,848	4,343	359	4,899
			Misc. nonmetallic minerals: Mineral industries.....	9	1	197	1,160	186	412	1,083	2,254	1,252	2,967	539	134	1,498

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958—Con.

Ind. code	Industry group and geographic area	1963											1958	
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of materials, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages						
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)					(\$1,000)	(\$1,000)
14	Mountain—Continued													
	Idaho.....	70	4	578	3,419	521	1,047	2,891	10,952	<sup>1</sup> 5,399	<sup>2</sup> 15,043	(NA)	(NA)	(NA)
	Mineral industries.....	60	4	485	<sup>3</sup> 3,043	428	862	<sup>2</sup> 5,515	8,765	<sup>5</sup> 150	<sup>12</sup> 607	<sup>1</sup> 308	(NA)	(NA)
	Included in manufactures.....	10	-	493	<sup>4</sup> 376	493	185	376	2,187	<sup>1</sup> 249	<sup>22</sup> 436	(NA)	<sup>4</sup> 47	146
144	Sand and gravel.....	36	-	195	895	190	377	869	3,122	<sup>1</sup> 823	<sup>2</sup> 3,780	(NA)	212	3,102
	Mineral industry.....	28	-	107	542	102	201	516	1,133	602	<sup>1</sup> 570	165	178	1,760
	Included in manufactures.....	8	-	488	<sup>4</sup> 353	488	176	353	1,989	<sup>1</sup> 221	<sup>22</sup> 210	(NA)	<sup>4</sup> 34	1,342
14	Wyoming.....	64	16	1,306	7,978	1,038	2,142	6,079	25,594	<sup>1</sup> 12,911	<sup>2</sup> 35,927	(NA)	1,006	17,751
	Mineral industries.....	55	16	1,278	7,819	1,010	2,088	5,920	24,916	12,733	<sup>35</sup> 071	<sup>2</sup> 578	974	16,921
	Included in manufactures	9	-	428	<sup>4</sup> 159	428	54	159	678	<sup>1</sup> 178	<sup>2</sup> 856	(NA)	<sup>4</sup> 32	830
142	Crushed and broken stone:													
	Mineral industry.....	7	3	129	698	122	221	673	1,340	582	1,844	78	87	585
144	Sand and gravel:													
	Mineral industry.....	25	1	125	558	119	238	552	1,501	717	1,891	327	94	1,053
14	Colorado.....	206	12	1,345	6,707	1,188	2,327	5,766	17,576	<sup>1</sup> 7,809	<sup>2</sup> 23,680	<sup>3</sup> 1,705	1,242	17,998
	Mineral industries.....	167	11	1,174	5,796	1,019	1,988	4,864	13,516	7,143	18,961	1,698	1,078	11,548
	Included in manufactures	39	1	471	<sup>4</sup> 911	469	339	902	4,060	<sup>1</sup> 666	<sup>24</sup> 719	<sup>2</sup> 7	<sup>4</sup> 164	6,450
142	Crushed and broken stone:													
	Mineral industry.....	18	2	149	661	136	285	569	1,400	748	2,048	100	216	2,002
144	Sand and gravel.....	106	5	670	3,677	604	1,179	3,222	10,244	<sup>1</sup> 4,402	<sup>2</sup> 13,679	(NA)	520	7,982
	Mineral industry.....	89	5	601	3,302	535	1,040	2,847	8,115	4,217	11,365	967	457	5,639
	Included in manufactures.....	17	-	469	<sup>4</sup> 375	469	139	375	2,129	<sup>1</sup> 185	<sup>22</sup> 314	(NA)	<sup>4</sup> 63	2,343
145	Clay and related minerals.....	36	1	<sup>4</sup> 158	<sup>4</sup> 756	<sup>4</sup> 135	275	681	1,734	<sup>1</sup> 1,052	<sup>22</sup> 559	(NA)	<sup>4</sup> 112	1,427
	Mineral industries.....	23	1	128	636	105	211	561	1,430	902	2,105	227	91	830
149	Misc. nonmetallic minerals:													
	Mineral industries.....	20	1	135	598	113	239	452	1,416	886	2,187	115	(NA)	(NA)
14	New Mexico.....	112	19	4,308	29,335	3,429	6,793	21,935	92,903	<sup>1</sup> 36,994	<sup>2</sup> 114,205	(NA)	4,160	69,316
	Mineral industries.....	96	17	4,167	28,610	3,293	6,524	21,235	89,249	<sup>36</sup> 453	<sup>110</sup> 018	<sup>15</sup> 684	4,091	67,142
	Included in manufactures.....	16	2	<sup>4</sup> 141	<sup>4</sup> 725	<sup>4</sup> 136	269	700	3,654	<sup>1</sup> 541	<sup>24</sup> 187	(NA)	<sup>4</sup> 69	2,174
142	Crushed and broken stone.....	7	-	65	289	63	126	286	1,230	<sup>1</sup> 401	<sup>2</sup> 1,602	(NA)	(NA)	(NA)
	Mineral industry.....	4	-	40	143	38	77	140	549	198	718	29	(NA)	(NA)
	Included in manufactures.....	3	-	<sup>4</sup> 25	<sup>4</sup> 146	<sup>4</sup> 25	49	146	681	<sup>1</sup> 203	<sup>2</sup> 884	(NA)	(NA)	(NA)
144	Sand and gravel.....	58	6	411	2,062	384	771	1,953	5,912	<sup>1</sup> 2,278	<sup>2</sup> 7,600	(NA)	359	5,826
	Mineral industry.....	50	5	326	1,621	299	601	1,512	3,432	2,002	4,844	590	309	3,769
	Included in manufactures.....	8	1	<sup>4</sup> 85	<sup>4</sup> 441	<sup>4</sup> 85	170	441	2,480	<sup>1</sup> 276	<sup>22</sup> 756	(NA)	<sup>4</sup> 50	2,057
147	Chemical and fertilizer minerals.....	17	7	3,553	25,258	2,729	5,412	18,144	81,673	31,510	98,659	14,524	3,554	60,470
148	Nonmetallic minerals services..	5	3	115	957	109	223	922	1,614	1,415	2,788	241	(NA)	(NA)
149	Misc. nonmetallic minerals:													
	Mineral industries.....	20	2	133	631	118	211	517	1,981	1,328	3,009	300	170	2,221
14	Arizona.....	115	12	1,274	5,748	1,141	2,233	5,010	18,128	<sup>1</sup> 5,130	<sup>2</sup> 21,930	<sup>3</sup> 1,328	861	10,926
	Mineral industries.....	85	10	929	4,139	804	1,552	3,429	9,761	<sup>3</sup> 842	<sup>12</sup> 296	<sup>1</sup> 307	535	4,408
	Included in manufactures.....	30	2	<sup>4</sup> 345	<sup>4</sup> 1,609	<sup>4</sup> 337	681	1,581	8,367	<sup>1</sup> 1,288	<sup>29</sup> 634	<sup>1</sup> 321	<sup>4</sup> 326	6,518
142	Dimension stone (dimension stone, n.e.c. subindustry)....	9	-	75	206	64	103	177	351	239	555	35	(NA)	(NA)
	Crushed and broken stone.....	26	1	180	923	170	318	869	3,357	<sup>1</sup> 1,145	<sup>24</sup> 178	(NA)	(NA)	(NA)
	Mineral industry.....	20	1	118	587	108	194	533	1,424	745	1,845	324	58	519
144	Sand and gravel.....	48	9	819	3,836	730	1,449	3,299	11,912	<sup>1</sup> 3,187	<sup>2</sup> 14,259	(NA)	390	6,280
	Mineral industry.....	37	7	594	2,787	505	989	2,250	6,189	<sup>2</sup> 551	<sup>7</sup> 900	840	108	993
	Included in manufactures.....	11	2	<sup>4</sup> 225	<sup>4</sup> 1,049	<sup>4</sup> 225	460	1,049	5,723	<sup>1</sup> 636	<sup>26</sup> 359	(NA)	<sup>4</sup> 282	5,287
149	Misc. nonmetallic minerals:													
	Mineral industries.....	22	2	155	605	134	284	494	1,835	410	2,122	123	281	2,258

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958-Con.

Ind. code	Industry group and geographic area	1963										1958		
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of materials, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employ-ees or more	Total	Payroll	Total	Man-hours	Wages						
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)
14	Mountain—Continued													
	Utah.....	105	15	1,298	<sup>1</sup> 612,562	1,148	<sup>1</sup> 63,976	<sup>1</sup> 611,171	<sup>1</sup> 626,120	<sup>1</sup> 621,908	<sup>1</sup> 634,612	(NA)	(NA)	(NA)
	Mineral industries.....	84	14	1,161	<sup>1</sup> 611,782	1,014	<sup>1</sup> 63,707	<sup>1</sup> 610,409	<sup>1</sup> 623,290	<sup>1</sup> 621,390	<sup>1</sup> 631,276	<sup>1</sup> 613,404	(NA)	(NA)
	Included in manufactures....	21	1	<sup>4</sup> 137	<sup>4</sup> 780	<sup>4</sup> 134	269	762	2,830	1,518	23,336	(NA)	<sup>4</sup> 86	3,934
142	Crushed and broken stone.....	14	3	191	986	147	290	900	3,090	1,759	23,608	(NA)	323	6,622
	Mineral industries.....	10	2	122	555	78	151	469	2,093	477	2,329	241	285	(NA)
	Included in manufactures....	4	1	<sup>4</sup> 69	<sup>4</sup> 431	<sup>4</sup> 69	139	431	997	1,282	21,279	(NA)	<sup>4</sup> 38	(NA)
144	Sand and gravel.....	50	4	360	1,653	330	602	1,493	4,482	11,890	25,894	(NA)	406	13,325
	Mineral industry.....	39	4	333	1,513	303	547	1,353	3,758	1,790	5,070	478	379	12,030
	Included in manufactures....	11	-	<sup>4</sup> 27	<sup>4</sup> 140	<sup>4</sup> 27	55	140	724	1,100	2,824	(NA)	<sup>4</sup> 27	1,295
145	Clay and related minerals:													
	Mineral industries.....	12	1	150	887	143	271	849	1,115	555	1,538	132	(NA)	(NA)
14	Nevada.....	99	8	723	4,498	651	1,428	3,923	16,052	17,015	21,806	(NA)	(NA)	(NA)
	Mineral industries.....	87	7	572	3,629	501	1,129	3,057	10,983	5,773	15,496	1,260	(NA)	(NA)
	Included in manufactures....	12	1	<sup>4</sup> 151	<sup>4</sup> 869	<sup>4</sup> 150	299	866	5,069	11,242	26,310	(NA)	<sup>4</sup> 82	82
144	Sand and gravel.....	36	2	214	1,090	192	401	924	3,766	11,711	25,098	(NA)	(NA)	(NA)
	Mineral industry.....	31	2	157	803	135	288	637	2,049	1,126	2,796	379	152	1,796
	Included in manufactures....	5	-	<sup>4</sup> 57	<sup>4</sup> 287	<sup>4</sup> 57	113	287	1,717	1,585	22,302	(NA)	(NA)	(NA)
147	Chemical and fertilizer minerals.....	19	-	47	221	41	87	210	821	613	1,370	64	54	749
149	Misc. nonmetallic minerals: Mineral industries.....	23	4	176	1,286	163	412	1,163	3,775	2,278	5,270	783	160	1,967
14	Pacific.....	1,345	181	16,153	103,133	13,053	26,847	80,067	281,628	115,129	236,025	31,732	12,773	202,126
	Mineral industries.....	1,126	157	13,967	92,002	10,898	22,554	69,132	237,775	103,966	310,080	31,661	11,360	167,581
	Included in manufactures....	219	24	<sup>4</sup> 2,186	<sup>4</sup> 11,131	<sup>4</sup> 2,155	4,293	10,935	43,853	11,163	254,945	3,771	<sup>4</sup> 1,413	34,545
141	Dimension stone.....	70	4	356	1,664	309	592	1,415	2,737	2,477	5,003	211	174	1,658
	Mineral industry.....	54	-	139	516	123	236	463	1,161	646	1,667	140	68	785
	Included in manufactures....	16	4	217	1,148	186	356	952	1,576	1,831	3,336	71	106	873
142	Crushed and broken stone.....	341	48	3,575	21,964	3,203	6,561	19,542	56,803	24,736	275,996	(NA)	<sup>5</sup> 2,726	<sup>5</sup> 41,112
	Mineral industry.....	298	36	2,668	16,627	2,296	4,747	14,205	38,025	19,984	52,466	5,543	<sup>5</sup> 2,078	<sup>5</sup> 24,876
	Included in manufactures....	43	12	<sup>4</sup> 907	<sup>4</sup> 5,337	<sup>4</sup> 907	1,814	5,337	18,778	14,752	223,530	(NA)	<sup>4</sup> 3,648	<sup>4</sup> 56,236
144	Sand and gravel.....	686	99	7,134	44,679	5,965	12,318	36,722	121,897	150,077	215,665	(NA)	5,284	87,266
	Mineral industry.....	568	98	6,452	41,574	5,283	10,952	33,617	105,449	46,853	136,993	15,309	4,838	74,029
	Included in manufactures....	118	1	<sup>4</sup> 682	<sup>4</sup> 3,105	<sup>4</sup> 682	1,366	3,105	16,448	13,224	219,672	(NA)	<sup>4</sup> 446	13,237
145	Clay and related minerals: Mineral industries.....	43	7	471	2,916	402	802	2,409	6,963	3,665	9,427	1,201	454	6,037
147	Chemical and fertilizer minerals.....	25	5	2,784	20,932	1,621	3,423	11,172	58,339	19,807	73,250	4,896	(NA)	(NA)
148	Nonmetallic minerals services.	10	3	136	813	128	238	714	1,463	692	2,107	48	(NA)	(NA)
149	Misc. nonmetallic minerals: Mineral industries.....	128	8	1,317	8,624	1,045	2,156	6,552	26,375	12,319	34,170	4,524	1,188	18,921
14	Washington.....	224	15	1,294	7,673	1,123	2,205	6,815	(D)	19,452	(D)	<sup>3</sup> 2,775	1,246	16,979
	Mineral industries.....	178	13	1,032	6,327	871	1,718	5,498	(D)	8,641	(D)	2,769	1,045	12,510
	Included in manufactures....	46	2	<sup>4</sup> 262	<sup>4</sup> 1,346	<sup>4</sup> 252	487	1,317	4,768	1,811	25,573	36	<sup>4</sup> 201	4,469
142	Crushed and broken stone.....	62	5	389	2,359	338	669	2,110	5,752	12,415	27,623	(NA)	(NA)	(NA)
	Mineral industry.....	52	4	309	1,826	258	509	1,577	4,243	2,070	5,769	544	385	3,552
	Included in manufactures....	10	1	<sup>4</sup> 80	<sup>4</sup> 533	<sup>4</sup> 80	160	533	1,509	1,345	21,854	(NA)	(NA)	(NA)
144	Sand and gravel.....	113	7	615	3,785	538	1,087	3,475	10,523	15,458	214,140	(NA)	517	9,157
	Mineral industry.....	91	7	494	3,227	417	845	2,917	7,661	5,113	10,933	1,841	427	5,942
	Included in manufactures....	22	-	<sup>4</sup> 121	<sup>4</sup> 558	<sup>4</sup> 121	242	558	2,862	1,345	23,207	(NA)	<sup>4</sup> 90	3,215
149	Clay and related minerals.....	13	1	<sup>4</sup> 156	<sup>4</sup> 847	<sup>4</sup> 128	220	605	2,454	11,020	23,327	(NA)	<sup>4</sup> 204	2,618
	Misc. nonmetallic minerals....	18	-	34	167	31	70	144	549	339	707	181	(NA)	(NA)

See footnotes at end of table.

TABLE 2A. General Statistics by Industry Group and Geographic Area: 1963 and 1958—Con.

Ind. code	Industry group and geographic area	1963										1958		
		Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of materials, etc., and purchased machinery installed	Value of shipments and receipts	Capital expenditures	All employees	Value added in mining
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages						
		(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
14	Pacific—Continued													
	Oregon.....	199	21	1,939	11,027	1,596	3,080	8,794	(D)	<sup>1</sup> 10,825	(D)	(NA)	1,078	11,566
	Mineral industries.....	174	21	1,805	10,419	1,462	2,810	8,186	(D)	10,271	(D)	3,133	931	8,812
	Included in manufactures.....	25	-	<sup>1</sup> 134	<sup>2</sup> 608	<sup>1</sup> 134	270	608	3,654	<sup>1</sup> 554	<sup>2</sup> 4,208	(NA)	<sup>4</sup> 147	2,754
142	Crushed and broken stone.....	74	9	602	3,363	546	1,042	3,037	5,930	<sup>1</sup> 4,142	<sup>2</sup> 9,263	(NA)	(NA)	(NA)
	Mineral industry.....	66	9	558	3,148	502	952	2,822	5,130	3,994	8,315	809	301	2,899
	Included in manufactures.....	8	-	444	<sup>2</sup> 215	<sup>4</sup> 444	90	215	800	<sup>1</sup> 148	<sup>2</sup> 948	(NA)	(NA)	(NA)
144	Sand and gravel: Mineral industry.....	86	11	1,121	6,634	839	1,637	4,747	10,201	5,335	13,486	2,050	532	5,059
149	Misc. nonmetallic minerals.....	10	-	42	214	38	79	195	623	357	840	140	76	568
14	California.....	857	141	12,482	82,152	9,929	20,770	62,411	234,226	<sup>1</sup> 92,098	<sup>2</sup> 301,139	<sup>3</sup> 25,185	9,937	167,912
	Mineral industries.....	717	119	10,744	73,212	8,212	17,336	53,638	199,866	82,545	257,291	25,120	8,908	141,321
	Included in manufactures.....	140	22	<sup>4</sup> 1,738	<sup>4</sup> 8,940	<sup>4</sup> 1,717	3,434	8,773	34,360	<sup>1</sup> 9,553	<sup>2</sup> 43,848	<sup>3</sup> 65	<sup>4</sup> 1,029	26,591
141	Dimension stone.....	49	3	277	1,359	246	486	1,150	2,294	2,303	4,446	151	119	1,127
	Mineral industry.....	39	-	101	402	91	179	360	956	530	1,400	86	51	604
	Included in manufactures.....	10	3	176	957	155	307	790	1,338	1,773	3,046	65	68	523
142	Crushed and broken stone.....	177	30	2,274	14,541	2,033	4,290	12,896	40,253	<sup>1</sup> 16,122	<sup>2</sup> 52,642	(NA)	1,598	29,577
	Mineral industries.....	156	19	1,516	10,054	1,275	2,774	8,409	24,558	12,033	32,858	3,733	1,066	14,794
	Included in manufactures.....	21	11	<sup>4</sup> 758	<sup>4</sup> 4,487	<sup>4</sup> 758	1,516	4,487	15,695	<sup>1</sup> 4,089	<sup>2</sup> 19,784	(NA)	<sup>2</sup> 532	14,783
144	Sand and gravel.....	453	81	5,215	33,367	4,411	9,239	27,634	96,624	<sup>1</sup> 38,350	<sup>2</sup> 123,705	(NA)	4,053	69,686
	Mineral industry.....	374	80	4,766	31,328	3,962	8,340	25,595	86,110	35,933	110,774	11,269	3,768	62,057
	Included in manufactures.....	79	1	<sup>4</sup> 449	<sup>4</sup> 2,039	<sup>4</sup> 449	899	2,039	10,514	<sup>2</sup> 4,417	<sup>2</sup> 12,931	(NA)	<sup>4</sup> 285	7,629
145	Clay and related minerals: Mineral industries.....	32	6	311	2,015	270	576	1,750	4,368	2,494	5,906	956	263	3,265
147	Chemical and fertilizer minerals.....	23	5	2,777	20,905	1,614	3,409	11,145	58,299	19,798	73,205	4,892	2,714	42,844
148	Nonmetallic minerals services..	6	1	46	296	38	76	197	702	264	958	8	14	63
149	Misc. nonmetallic minerals: Mineral industries.....	87	8	1,227	8,212	962	1,982	6,182	24,873	11,493	32,190	4,176	1,032	17,694
14	Alaska.....	16	-	499	4523	493	185	496	1,330	<sup>1</sup> 449	<sup>2</sup> 1,660	<sup>3</sup> 119	467	782
	Mineral industries.....	13	-	71	386	65	130	359	1,027	373	1,281	119	55	388
14	Hawaii.....	49	4	339	1,758	312	607	1,551	5,677	<sup>1</sup> 2,305	<sup>2</sup> 7,462	(NA)	445	4,887
	Mineral industries.....	44	4	315	1,658	288	560	1,451	4,909	<sup>2</sup> 1,366	<sup>6</sup> 5,525	520	421	4,550
	Included in manufactures.....	5	-	24	<sup>4</sup> 100	<sup>4</sup> 24	47	100	768	<sup>1</sup> 169	<sup>2</sup> 937	(NA)	424	337
142	Crushed and broken stone: Mineral industry.....	24	4	285	1,599	261	512	1,397	4,094	1,887	5,524	457	326	3,631

Note: For explanation of column captions, see Introduction.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.<sup>1</sup>For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, excludes the cost of purchased machinery installed.<sup>2</sup>For value of shipments and receipts, includes the estimated value of minerals produced and used in the same establishment.<sup>3</sup>Excludes figures for crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments.<sup>4</sup>For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, the number of production, development, and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations, hence, the same figures are included for production, development, and exploration workers and for all employees at such operations.<sup>5</sup>For the crushed and broken granite subindustry, excludes data for 1 establishment in Alaska with less than 5 employees, and for crushed limestone quarries in manufactures, excludes data for 1 quarry in Hawaii with 5 to 9 employees.<sup>6</sup>Excludes figures for Hawaii.<sup>7</sup>Data for metal mining operations are included with those for nonmetallic minerals mining.<sup>8</sup>Represents the cost of supplies, etc., and purchased machinery less capital expenditures.<sup>9</sup>Includes data for central offices and related facilities in the oil and gas extraction industries.<sup>10</sup>Includes data for the oil and gas extraction industries.<sup>11</sup>Excludes data for central offices and related facilities in the fluorspar industry.<sup>12</sup>Includes figures for phosphate rock mined, washed or concentrated in Pennsylvania, Arkansas, Louisiana, and Texas, amounting to less than 10 percent of this total.<sup>13</sup>Includes data for 4 metal mining services establishments.<sup>14</sup>Includes data for 2 establishments classified in manufacturing in 1963.<sup>15</sup>Includes data for 1 establishment classified in manufacturing in 1963.<sup>16</sup>Figures for the mineral industries in Montana are included with those for Utah.

TABLE 2B. Selected Expenditures and Net Shipments of Primary Products for Selected Industry Groups and Geographic Areas: 1963

Ind. code	Industry group and geographic area	Selected expenses (\$1,000)					Capital expenditures (\$1,000)			Net shipments of primary products <sup>2</sup>			
		Total	Supplies, purchases for resale, and purchased fuels and electric energy	Minerals received for preparation	Contract work	Purchased machinery installed	Total	Development and exploration of mineral property	Plant and other construction, machinery, and equipment <sup>1</sup>	By establishments classified in the industry		By establishments classified in other mineral industries and in manufacturing industries <sup>3</sup>	
										Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
	United States, total.....	849,657	544,700	55,145	77,645	172,167	247,528	16,081	231,447	(X)	(X)	(X)	(X)
141	Dimension stone.....	6,007	4,601	14	630	762	1,114	33	1,081	1,330	18,525	2,154	73,124
142	Crushed and broken stone.....	295,892	203,235	9,051	23,599	60,007	82,687	1,402	81,285	474,413	739,193	121,156	166,002
144	Sand and gravel.....	240,064	155,934	3,821	22,356	57,953	75,724	1,191	74,533	557,513	646,204	62,100	84,900
145	Clay and related minerals.....	62,678	46,084	438	5,075	11,081	14,619	1,128	13,491	16,458	156,175	35,569	71,228
147	Chemical and fertilizer minerals.....	203,612	108,659	41,266	19,838	33,849	60,021	10,801	49,220	(X)	(X)	(X)	(X)
148	Nonmetallic minerals services.....	5,354	3,339	(X)	951	1,064	1,434	6	1,428	(X)	12,751	(X)	383
149	Misc. nonmetallic minerals.....	36,050	22,848	555	5,196	7,451	11,929	1,520	10,409	(X)	(X)	(X)	(X)
	Geographic Area												
14	New England.....	20,891	13,311	724	1,596	5,260	7,120	449	6,671	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	4,967	43,656	(4)	315	996	1,394	11	1,383	8,042	13,898	3,781	8,135
144	Sand and gravel.....	12,101	6,840	484	1,024	3,753	4,699	42	4,657	27,400	532,838	4,575	(5)
	Maine:												
144	Sand and gravel.....	526	310	1	12	203	221	5	216	1,260	51,526	298	(5)
14	New Hampshire.....	1,388	859	-	209	320	470	2	468	(X)	(X)	(X)	(X)
144	Sand and gravel.....	1,126	632	-	201	293	377	1	376	2,402	52,471	26	(5)
14	Vermont.....	3,332	42,673	(4)	163	496	1,040	390	650	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	594	484	-	8	102	216	-	216	803	52,234	245	(5)
14	Massachusetts.....	8,687	45,451	(4)	499	2,737	3,147	29	3,118	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	1,932	41,143	(4)	165	624	547	6	541	3,000	5,518	2,149	3,541
144	Sand and gravel.....	6,472	3,710	352	310	2,100	2,567	22	2,545	15,042	516,967	2,580	(5)
14	Rhode Island.....	903	4502	(4)	278	123	260	6	254	(X)	(X)	(X)	(X)
144	Sand and gravel.....	682	4299	(4)	262	121	171	5	166	1,865	52,095	70	(5)
	Connecticut:												
142	Crushed and broken stone.....	2,059	41,707	(4)	116	236	431	2	429	3,613	5,667	1,055	2,877
144	Sand and gravel.....	3,001	1,707	91	221	982	1,304	9	1,295	6,138	59,063	1,355	(5)
14	Middle Atlantic.....	90,825	61,784	3,810	6,472	18,759	25,908	571	25,338	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	54,183	440,154	(4)	3,912	10,117	14,782	162	14,620	70,686	137,229	18,976	26,233
144	Sand and gravel.....	24,606	16,641	360	2,036	5,569	7,704	231	7,473	51,540	583,836	7,376	(5)
147	Chemical and fertilizer minerals...	4,778	43,342	(4)	1	1,235	1,383	1	1,382	(X)	(X)	(X)	(X)
14	New York.....	30,022	21,516	820	1,527	6,159	8,504	320	8,184	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	14,506	10,768	567	426	2,745	3,355	55	3,300	22,906	43,012	3,252	4,884
144	Sand and gravel.....	8,228	5,493	253	839	1,643	2,588	124	2,464	24,273	533,782	4,195	(5)
149	Misc. nonmetallic minerals.....	2,563	2,383	-	13	167	861	118	743	(X)	(X)	(X)	(X)
14	New Jersey.....	23,237	17,127	641	723	4,746	6,851	75	6,776	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	13,526	411,078	(4)	205	2,243	4,074	13	4,061	12,133	32,203	1,054	2,440
144	Sand and gravel.....	8,930	46,477	(4)	508	1,945	2,595	56	2,539	14,714	526,533	1,383	(5)
14	Pennsylvania.....	37,566	23,141	2,349	4,222	7,854	10,553	176	10,377	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	26,151	16,043	1,698	3,281	5,129	7,353	94	7,259	35,647	62,014	4,047	6,891
144	Sand and gravel.....	7,448	44,778	(4)	689	1,981	2,521	51	2,470	12,553	525,694	1,798	(5)
145	Clay and related minerals.....	1,791	1,001	-	226	564	524	24	500	(X)	(X)	(X)	(X)
14	East North Central.....	127,639	85,483	1,538	10,717	29,901	38,109	1,015	37,094	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	60,559	42,768	660	4,021	13,110	16,739	247	16,492	116,245	161,911	23,916	27,457
144	Sand and gravel.....	51,947	32,194	627	5,477	13,649	17,254	252	17,002	138,717	5161,050	8,501	(5)
145	Clay and related minerals.....	4,275	3,045	(4)	215	1,015	742	63	679	(X)	(X)	(X)	(X)
147	Chemical and fertilizer minerals...	6,869	44,917	(4)	478	1,474	2,348	445	1,903	(X)	(X)	(X)	(X)
149	Misc. nonmetallic minerals.....	2,805	1,947	-	367	491	707	7	700	(X)	(X)	(X)	(X)
	Ohio:												
142	Crushed and broken stone.....	16,770	12,343	335	773	3,319	5,173	55	5,118	29,810	42,888	69,898	611,938
144	Sand and gravel.....	12,180	7,441	313	794	3,632	4,431	83	4,348	35,532	544,382	1,785	(5)
14	Indiana.....	16,930	411,122	(4)	1,857	3,951	5,222	44	5,178	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	8,650	45,974	(4)	923	1,753	2,838	24	2,814	16,244	21,704	3,006	2,183
144	Sand and gravel.....	7,218	44,292	(4)	841	2,085	2,134	18	2,116	21,944	521,929	1,193	(5)
	Illinois:												
142	Crushed and broken stone.....	16,778	411,199	(4)	1,152	4,427	4,447	43	4,404	34,095	47,392	5,197	6,159
144	Sand and gravel.....	13,720	49,006	(4)	853	3,861	4,483	37	4,446	27,944	536,687	1,065	(5)
14	Michigan.....	21,166	14,245	226	2,434	4,261	6,402	74	6,328	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	5,851	4,603	-	205	1,043	1,629	31	1,598	24,978	26,880	74,882	75,976
144	Sand and gravel.....	11,294	6,880	226	1,765	2,423	3,870	40	3,830	34,711	536,752	1,491	(5)
149	Misc. nonmetallic minerals.....	2,210	1,503	-	295	412	582	2	580	(X)	(X)	(X)	(X)

See footnotes at end of table.



TABLE 2B. Selected Expenditures and Net Shipments of Primary Products for Selected Industry Groups and Geographic Areas: 1963—Continued

Ind. code	Industry group and geographic area	Selected expenses (\$1,000)					Capital expenditures (\$1,000)			Net shipments of primary products <sup>2</sup>			
		Total	Supplies, purchases for resale, and purchased fuels and electric energy	Minerals received for preparation	Contract work	Purchased machinery installed	Total	Development and exploration of mineral property	Plant and other construction, machinery, and equipment <sup>1</sup>	By establishments classified in the industry		By establishments classified in other mineral industries and in manufacturing industries <sup>3</sup>	
										Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
	East North Central—Continued												
14	Wisconsin.....	20,474	13,794	213	2,202	4,265	5,044	169	4,875	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	12,510	48,974	( <sup>4</sup> )	968	2,568	2,652	94	2,558	11,118	23,047	<sup>8</sup> 689	<sup>8</sup> 94.3
144	Sand and gravel.....	7,535	44,663	( <sup>4</sup> )	1,224	1,648	2,336	74	2,262	18,616	<sup>21</sup> 21,300	2,967	( <sup>5</sup> )
14	West North Central.....	72,374	45,189	1,719	9,135	16,331	21,596	491	21,105	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	37,656	24,150	1,075	3,900	8,531	12,117	306	11,811	56,397	81,726	13,829	17,552
144	Sand and gravel.....	26,710	15,756	604	3,742	6,608	7,800	153	7,647	66,474	<sup>56</sup> 68,282	3,060	( <sup>5</sup> )
145	Clay and related minerals.....	3,168	1,944	40	629	555	734	21	713	(X)	(X)	(X)	(X)
	Minnesota.....	9,392	46,437	( <sup>4</sup> )	1,295	1,660	2,051	30	2,021	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	2,313	41,618	( <sup>4</sup> )	481	214	500	8	492	4,013	<sup>5</sup> 4,446	90	186
144	Sand and gravel.....	6,411	44,299	( <sup>4</sup> )	803	1,309	1,412	22	1,390	17,853	<sup>51</sup> 16,299	900	( <sup>5</sup> )
14	Iowa.....	15,607	10,720	564	1,573	2,750	4,851	192	4,659	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	10,838	7,397	564	1,168	1,709	3,680	156	3,524	18,212	24,934	<sup>92</sup> 4,223	<sup>92</sup> 9,911
144	Sand and gravel.....	4,444	3,039	-	405	1,000	1,127	36	1,091	10,535	<sup>51</sup> 11,781	341	( <sup>5</sup> )
14	Missouri.....	24,661	13,873	502	3,240	7,046	8,729	187	8,542	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	15,624	8,824	298	1,634	4,868	5,888	115	5,773	21,794	32,368	7,045	10,034
144	Sand and gravel.....	4,262	2,127	204	510	1,421	1,724	40	1,684	9,693	<sup>51</sup> 12,992	743	( <sup>5</sup> )
147	Chemical and fertilizer minerals...	2,719	1,817	-	695	207	314	-	314	(X)	(X)	(X)	(X)
14	Nebraska <sup>10</sup> .....	7,331	4,266	-	1,123	1,942	1,890	24	1,866	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	2,728	1,627	-	419	682	438	7	431	2,911	4,835	<sup>8</sup> 13	<sup>8</sup> 18
144	Sand and gravel.....	4,543	2,609	-	697	1,237	1,426	17	1,409	11,482	<sup>51</sup> 10,993	215	( <sup>5</sup> )
14	Kansas.....	9,364	6,334	245	1,153	1,632	2,612	40	2,572	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	5,159	44,131	( <sup>4</sup> )	131	897	1,370	20	1,350	8,860	12,767	2,459	2,832
144	Sand and gravel.....	3,581	41,881	( <sup>4</sup> )	965	735	1,175	20	1,155	9,995	<sup>58</sup> 8,778	282	( <sup>5</sup> )
14	South Atlantic.....	185,726	108,199	33,864	9,523	34,140	44,520	1,907	42,613	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	61,906	42,894	1,567	5,488	11,957	13,280	167	13,113	100,196	162,246	<sup>116</sup> 6,190	<sup>119</sup> 9,038
144	Sand and gravel.....	24,110	16,849	753	1,531	4,977	7,557	64	7,493	51,677	<sup>57</sup> 70,074	4,750	( <sup>5</sup> )
145	Clay and related minerals.....	29,494	22,488	320	1,360	5,326	8,125	654	7,471	(X)	(X)	(X)	(X)
147	Chemical and fertilizer minerals...	65,686	22,826	30,940	865	11,055	14,560	968	13,592	(X)	(X)	(X)	(X)
149	Misc. nonmetallic minerals.....	3,512	2,373	270	173	696	836	50	786	(X)	(X)	(X)	(X)
14	Delaware and Maryland.....	13,517	49,169	( <sup>4</sup> )	1,906	2,442	3,844	253	3,591	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	6,869	4,069	57	1,604	1,139	1,171	31	1,140	9,801	17,990	2,578	3,367
144	Sand and gravel.....	6,157	44,670	( <sup>4</sup> )	295	1,192	1,746	17	1,729	13,290	<sup>51</sup> 19,874	1,558	( <sup>5</sup> )
	Maryland.....	5,713	44,515	( <sup>4</sup> )	200	998	1,594	16	1,578	12,919	<sup>58</sup> 18,100	1,202	( <sup>5</sup> )
14	Virginia.....	20,802	15,490	356	1,124	3,832	5,162	43	5,119	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	13,009	49,722	( <sup>4</sup> )	849	2,438	3,141	32	3,109	23,017	37,441	3,791	4,546
144	Sand and gravel.....	5,882	44,375	( <sup>4</sup> )	258	1,249	1,648	9	1,639	9,755	<sup>51</sup> 12,929	389	( <sup>5</sup> )
14	West Virginia.....	6,491	44,200	( <sup>4</sup> )	924	1,367	1,530	6	1,524	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	3,620	2,104	-	900	616	550	5	545	5,504	10,100	1,162	1,867
144	Sand and gravel.....	2,671	41,941	( <sup>4</sup> )	23	707	932	1	931	5,256	<sup>12</sup> 10,907	<sup>8</sup> 120	<sup>12</sup> 1,867
	North Carolina:												
142	Crushed and broken stone.....	8,407	5,574	182	626	2,025	1,159	3	1,156	14,224	23,467	<sup>8</sup> 375	<sup>8</sup> 730
144	Sand and gravel.....	2,403	1,921	-	50	432	597	2	595	7,670	<sup>58</sup> 8,950	393	( <sup>5</sup> )
149	Misc. nonmetallic minerals.....	1,979	41,547	( <sup>4</sup> )	73	359	505	39	466	(X)	(X)	(X)	(X)
	South Carolina:												
142	Crushed and broken stone.....	3,891	3,012	-	257	622	1,026	5	1,021	7,744	11,677	<sup>8</sup> 5	<sup>8</sup> 16
145	Clay and related minerals.....	3,098	2,724	-	-	374	584	-	584	(X)	(X)	(X)	(X)
14	Georgia.....	39,529	430,780	( <sup>4</sup> )	1,323	7,426	9,130	526	8,604	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	15,718	412,668	( <sup>4</sup> )	255	3,195	3,306	62	3,244	17,933	33,587	<sup>8</sup> 163	<sup>8</sup> 352
145	Clay and related minerals.....	20,511	416,177	( <sup>4</sup> )	838	3,496	4,785	440	4,345	(X)	(X)	(X)	(X)
14	Florida.....	78,541	462,604	( <sup>4</sup> )	2,290	13,647	17,986	164	17,822	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	10,392	7,020	453	997	1,922	2,927	29	2,898	21,973	27,984	<sup>134</sup> 7,706	<sup>135</sup> 9,982
144	Sand and gravel.....	3,334	41,642	( <sup>4</sup> )	848	1,361	1,361	20	1,341	8,446	<sup>58</sup> 8,710	1,306	( <sup>5</sup> )
147	Chemical and fertilizer minerals...	62,839	452,044	( <sup>4</sup> )	350	10,448	<sup>14</sup> 14,174	<sup>14</sup> 979	<sup>14</sup> 13,195	(X)	(X)	(X)	(X)
14	East South Central.....	68,149	42,696	3,622	8,232	13,599	20,442	514	19,928	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	29,367	18,624	1,793	1,727	7,223	11,431	308	11,123	55,096	75,609	<sup>157</sup> 1,160	<sup>158</sup> 8,833
144	Sand and gravel.....	12,550	8,737	421	1,077	2,315	3,413	71	3,342	25,040	<sup>51</sup> 31,924	1,779	( <sup>5</sup> )
145	Clay and related minerals.....	6,223	4,412	-	509	1,302	1,578	78	1,500	(X)	(X)	(X)	(X)
147	Chemical and fertilizer minerals...	18,346	9,969	1,408	4,507	2,462	3,406	49	3,357	(X)	(X)	(X)	(X)
14	Kentucky.....	18,494	11,909	1,470	1,245	3,870	6,542	275	6,267	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	12,001	8,269	60	792	2,880	4,992	249	4,743	24,138	34,472	<sup>8</sup> 119	<sup>8</sup> 152
144	Sand and gravel.....	2,961	42,094	( <sup>4</sup> )	239	628	847	3	844	6,556	<sup>167</sup> 7,500	(D)	( <sup>16</sup> )

See footnotes at end of table

**TABLE 2B. Selected Expenditures and Net Shipments of Primary Products for Selected Industry Groups and Geographic Areas: 1963—Continued**

Ind. code	Industry group and geographic area	Selected expenses (\$1,000)					Capital expenditures (\$1,000)			Net shipments of primary products <sup>2</sup>			
		Total	Supplies, purchases for resale, and purchased fuels and electric energy	Minerals received for preparation	Contract work	Purchased machinery installed	Total	Development and exploration of mineral property	Plant and other construction, machinery, and equipment <sup>1</sup>	By establishments classified in the industry		By establishments classified in other mineral industries and in manufacturing industries <sup>3</sup>	
										Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
	East South Central—Continued												
14	Tennessee.....	32,597	21,273	563	5,576	5,185	7,613	141	7,472	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	9,372	6,816	171	350	2,035	3,110	39	3,071	21,115	\$11,279,986	13,308	(X)
144	Sand and gravel.....	3,971	3,049	-	514	408	942	24	918	6,609	9,765	945	873
145	Clay and related minerals.....	2,102	1,728	-	76	298	258	35	223	(X)	(X)	(X)	(X)
14	Alabama.....	12,582	48,132	(4)	961	3,489	5,130	63	5,067	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	7,994	3,539	1,562	585	2,308	3,329	20	3,309	9,843	(D)	(D)	(D)
144	Sand and gravel.....	2,596	41,786	(4)	237	573	876	21	855	5,248	\$7,562	543	(X)
14	Mississippi.....	4,476	2,967	4	450	1,055	1,157	35	1,122	(X)	(X)	(X)	(X)
144	Sand and gravel.....	3,022	42,229	(4)	87	706	748	23	725	6,627	\$86,676	884	(X)
14	West South Central.....	87,603	468,518	(4)	5,340	13,745	20,933	924	20,009	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	23,838	18,221	14	1,913	3,690	6,416	43	6,373	34,562	49,063	12,107	13,748
144	Sand and gravel.....	26,924	419,220	(4)	2,107	5,597	7,731	112	7,619	52,581	\$69,931	3,647	(X)
145	Clay and related minerals.....	3,137	2,534	(4)	487	116	492	77	415	(X)	(X)	(X)	(X)
147	Chemical and fertilizer minerals.....	29,321	425,287	(4)	521	3,513	4,997	563	4,434	(X)	(X)	(X)	(X)
149	Misc. nonmetallic minerals.....	3,464	42,395	(4)	288	781	1,139	124	1,015	(X)	(X)	(X)	(X)
14	Arkansas.....	15,876	12,258	14	1,524	2,080	2,946	35	2,911	(X)	(X)	(X)	(X)
144	Sand and gravel.....	3,001	1,865	-	373	763	1,155	22	1,133	6,092	\$177,990	17,439	(X)
14	Louisiana.....	25,238	419,913	(4)	801	4,524	6,434	571	5,863	(X)	(X)	(X)	(X)
144	Sand and gravel.....	7,881	46,010	(4)	456	1,415	2,062	30	2,032	14,360	\$171,993	17,514	(X)
147	Chemical and fertilizer minerals.....	16,168	412,938	(4)	338	2,892	4,226	540	3,686	(X)	(X)	(X)	(X)
14	Oklahoma.....	6,594	4,856	-	405	1,333	2,040	37	2,003	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	4,047	3,073	-	221	753	1,133	21	1,112	10,963	\$11,245	1,739	1,820
144	Sand and gravel.....	1,976	1,310	-	169	497	767	8	759	5,046	\$176,704	17,274	(X)
14	Texas.....	39,895	431,477	(4)	2,610	5,808	9,513	281	9,232	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	9,346	6,878	-	635	1,833	3,840	14	3,826	15,531	17,454	187,445	187,922
144	Sand and gravel.....	14,066	410,035	(4)	1,109	2,922	3,747	52	3,695	27,083	\$193,526	172,547	(X)
149	Misc. nonmetallic minerals.....	2,313	41,485	(4)	286	542	907	121	786	(X)	(X)	(X)	(X)
14	Mountain.....	92,484	457,489	(4)	16,940	18,055	37,239	8,890	28,349	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	3,432	2,405	-	354	673	985	31	954	4,977	10,228	6,671	9,032
144	Sand and gravel.....	14,265	49,201	(4)	1,491	3,571	4,257	44	4,213	34,060	\$54,548	12,038	(X)
145	Clay and related minerals.....	8,041	6,700	-	754	587	704	13	691	(X)	(X)	(X)	(X)
147	Chemical and fertilizer minerals.....	55,762	432,648	(4)	12,026	11,088	28,063	8,225	19,838	(X)	(X)	(X)	(X)
148	Nonmetallic minerals services.....	2,148	1,366	-	467	315	562	-	562	(X)	(X)	(X)	(X)
149	Misc. nonmetallic minerals.....	8,687	45,033	(4)	1,844	1,810	2,639	577	2,062	(X)	(X)	(X)	(X)
14	Montana.....												
147	Chemical and fertilizer minerals.....	5,628	1,426	-	2,549	1,653	4,343	647	3,696	(X)	(X)	(X)	(X)
14	Idaho.....	5,150	2,630	-	1,932	588	1,308	1	1,307	(X)	(X)	(X)	(X)
14	Wyoming.....	13,733	(D)	(D)	(D)	2,128	2,578	28	2,550	(X)	(X)	(X)	(X)
14	Colorado.....	7,143	(D)	16	(D)	1,239	1,698	83	1,615	(X)	(X)	(X)	(X)
144	Sand and gravel.....	4,217	2,669	16	765	767	967	10	957	10,084	\$13,088	1,876	(X)
14	New Mexico.....	36,453	425,634	(4)	4,598	6,191	15,684	3,824	11,860	(X)	(X)	(X)	(X)
147	Chemical and fertilizer minerals.....	31,510	422,708	(4)	3,668	5,134	14,524	3,774	10,750	(X)	(X)	(X)	(X)
14	Arizona.....	3,842	2,637	-	261	944	1,307	36	1,271	(X)	(X)	(X)	(X)
144	Sand and gravel.....	2,551	1,752	-	167	632	840	6	834	5,977	\$14,921	3,651	(X)
14	Utah.....												
144	Sand and gravel.....	1,790	41,281	(4)	116	393	478	3	475	5,236	\$5,544	664	(X)
14	Nevada.....	5,773	44,278	(4)	447	1,048	1,260	87	1,173	(X)	(X)	(X)	(X)
149	Misc. nonmetallic minerals.....	2,278	1,454	-	217	607	783	84	699	(X)	(X)	(X)	(X)
14	Pacific.....	103,966	70,728	1,171	9,690	22,377	31,661	1,320	30,341	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	19,984	13,393	912	1,969	3,710	5,543	123	5,420	28,212	47,283	18,786	25,571
144	Sand and gravel.....	46,853	30,899	169	3,871	11,914	15,309	222	15,087	110,024	\$145,697	16,374	(X)
145	Clay and related minerals.....	3,665	2,327	-	535	803	1,201	175	1,026	(X)	(X)	(X)	(X)
147	Chemical and fertilizer minerals.....	19,807	16,273	-	719	2,815	4,896	549	4,347	(X)	(X)	(X)	(X)
149	Misc. nonmetallic minerals.....	12,319	6,872	90	2,377	2,980	4,524	248	4,276	(X)	(X)	(X)	(X)
14	Washington.....	8,641	4,879	232	1,348	2,182	2,769	86	2,683	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	2,070	41,292	(4)	377	401	544	20	524	2,947	\$5,149	8374	8,426
144	Sand and gravel.....	5,113	42,755	(4)	866	1,492	1,841	26	1,815	10,035	\$13,190	2,572	(X)
14	Oregon.....	10,271	6,625	276	1,072	2,298	3,133	48	3,085	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	3,994	42,820	(4)	740	434	809	6	803	4,707	7,254	955	1,382
144	Sand and gravel.....	5,335	43,367	(4)	277	1,691	2,050	32	2,018	9,683	\$15,187	81,462	(X)

See footnotes at end of table.

**TABLE 2B. Selected Expenditures and Net Shipments of Primary Products for Selected Industry Groups and Geographic Areas: 1963-Continued**

Ind. code	Industry group and geographic area	Selected expenses (\$1,000)					Capital expenditures (\$1,000)			Net shipments of primary products <sup>2</sup>			
		Total	Supplies, purchases for resale, and purchased fuels and electric energy	Minerals received for preparation	Contract work	Purchased machinery installed	Total	Development and exploration of mineral property	Plant and other construction, machinery, and equipment <sup>1</sup>	By establishments classified in the industry		By establishments classified in other mineral industries and in manufacturing industries <sup>3</sup>	
										Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
14	Pacific—Continued												
142	California.....	82,545	57,442	663	7,010	17,430	25,120	1,164	23,956	(X)	(X)	(X)	(X)
144	Crushed and broken stone.....	12,033	8,178	438	810	2,607	3,733	81	3,652	18,373	30,282	18,530	18,20,153
144	Sand and gravel.....	35,933	24,664	135	2,372	8,562	11,269	160	11,109	89,475	114,656	11,055	(?)
145	Clay and related minerals.....	2,494	1,369	-	447	678	956	138	818	(X)	(X)	(X)	(X)
147	Chemical and fertilizer minerals...	19,798	16,264	-	719	2,815	4,892	549	4,343	(X)	(X)	(X)	(X)
149	Misc. nonmetallic minerals.....	11,493	6,437	90	2,260	2,706	4,176	233	3,943	(X)	(X)	(X)	(X)
14	Hawaii.....	2,136	1,639	-	177	320	520	18	502	(X)	(X)	(X)	(X)
142	Crushed and broken stone.....	1,887	1,577	-	42	268	457	16	441	2,185	4,598	(D)	(D)

Note: For explanation of column captions, see Introduction.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. n.e.c. Not elsewhere classified.

<sup>1</sup>Represents expenditures during the year for both new and used plant and equipment.

<sup>2</sup>Represents gross shipments of the mineral indicated by the industry name less minerals transferred to other establishments for preparation or less minerals received from other establishments for preparation.

<sup>3</sup>Unless otherwise specified, includes figures for minerals produced and used in the same establishment in making manufactured products. The value of such products was estimated.

<sup>4</sup>Figures for cost of minerals received for preparation are included with those for cost of supplies, purchases for resale, and purchased fuels and electric energy.

<sup>5</sup>Figures for such products of establishments classified in other industries are included with those for establishments classified in the specified industry.

<sup>6</sup>Includes figures for stone produced and used in the same establishment in making cement and lime. Excludes stone produced and used in the same establishment in making ready-mixed concrete and asphalt and tar paving mixtures and block.

<sup>7</sup>Includes figures for stone produced and used in the same establishment in making cement. Excludes stone produced and used in the same establishment in making ready-mixed concrete.

<sup>8</sup>Excludes figures for minerals produced and used in the same establishment.

<sup>9</sup>Includes figures for stone produced and used in the same establishment in making cement. Excludes stone used in making lime.

<sup>10</sup>Includes figures for 1 nonproducing establishment in the metal mining industries.

<sup>11</sup>Includes figures for minerals produced and used in the same establishment in making manufactured products, except cement.

<sup>12</sup>Figures for shipments of primary products of establishments classified in other industries are included with those for establishments classified in the specified industry. Represents gross shipments. See also footnote 8.

<sup>13</sup>Includes figures for stone produced and used in the same establishment in making manufactured products. Excludes stone shipped in other mineral industries, amounting to less than 25 percent of the totals shown.

<sup>14</sup>Includes figures for phosphate rock mined, washed, or concentrated in Pennsylvania, North Carolina, Arkansas, Louisiana, and Texas, amounting to less than 10 percent of this total.

<sup>15</sup>Includes figures for minerals produced and used in the same establishment in making manufactured products, except that so used in the mineral industries.

<sup>16</sup>Represents value of gross shipments. See also footnotes 5 and 8.

<sup>17</sup>No minerals were reported produced and used.

<sup>18</sup>Includes figures for minerals produced and used in the same establishment in making manufactured products, except such products used in making lime.

<sup>19</sup>Represents gross shipments. See also footnote 5.

TABLE 2C. Selected Statistics for Industry Groups, Except Service Industries, by Type of Operation and Geographic Area: 1963

Ind. code	Industry group, geographic area and item	All types of establishments total	Producing establishments										Non-producing establishments
			Total	Mining only				Mines with preparation plants				Separately operated preparation plants	
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
	United States:												
	Establishments.....number..	8,302	8,161	1,654	51	1,566	37	6,411	122	5,842	447	96	141
	Employees.....do.....	120,367	119,771	9,660	712	6,819	2,129	105,696	10,816	84,972	9,908	1,971	596
	Value added in mining.....\$1,000..	1,735,448	1,735,722	154,732	7,726	72,957	74,049	1,544,620	191,104	1,203,970	149,546	36,370	( <sup>2</sup> )
141	Dimension stone:												
	Establishments.....number..	319	310	298	3	295	-	12	-	12	-	-	9
	Employees.....do.....	2,156	2,142	1,928	19	1,909	-	214	-	214	-	-	14
	Value added in mining.....\$1,000..	14,842	14,847	13,640	137	13,503	-	1,207	-	1,207	-	-	( <sup>2</sup> )
142	Crushed and broken stone:												
	Establishments.....number..	2,256	2,224	127	1	126	-	2,051	64	1,970	17	46	32
	Employees.....do.....	43,236	43,069	981	(D)	(D)	-	39,864	(D)	36,928	(D)	885	167
	Value added in mining.....\$1,000..	581,655	582,008	14,759	(D)	(D)	-	554,879	(D)	521,033	(D)	12,370	( <sup>2</sup> )
144	Sand and gravel:												
	Establishments.....number..	4,616	4,568	742	-	716	26	3,794	-	3,380	414	32	48
	Employees.....do.....	40,142	39,921	2,237	-	2,148	89	36,159	-	30,461	5,698	449	221
	Value added in mining.....\$1,000..	513,728	514,151	24,301	-	23,184	1,117	485,071	-	418,626	66,445	4,779	( <sup>2</sup> )
145	Clay and related minerals:												
	Establishments.....number..	423	416	225	12	211	2	191	3	188	-	-	7
	Employees.....do.....	8,316	8,304	977	(D)	804	(D)	7,327	33	7,294	-	-	12
	Value added in mining.....\$1,000..	113,585	113,046	12,203	(D)	10,554	(D)	100,843	252	100,591	-	-	539
147	Chemical and fertilizer minerals:												
	Establishments.....number..	235	212	80	14	58	8	114	34	68	12	18	23
	Employees.....do.....	21,040	20,899	2,986	550	517	1,919	17,276	7,996	6,257	3,023	637	141
	Value added in mining.....\$1,000..	433,313	433,357	82,330	5,440	4,950	71,940	331,806	155,086	106,133	70,587	19,221	( <sup>2</sup> )
149	Misc. nonmetallic minerals:												
	Establishments.....number..	453	431	182	21	160	1	249	21	224	4	-	22
	Employees.....do.....	5,477	5,436	551	(D)	462	(D)	4,856	(D)	3,818	(D)	-	41
	Value added in mining.....\$1,000..	78,325	78,313	7,499	(D)	6,212	(D)	70,814	(D)	56,380	(D)	-	12
	DIVISIONS AND STATES												
	New England												
14	Nonmetallic minerals mining:												
	Establishments.....number..	343	334	73	2	71	-	258	4	248	6	3	9
	Employees.....do.....	3,705	3,672	3,498	(D)	(D)	-	3,021	100	2,854	67	62	33
	Value added in mining.....\$1,000..	341,941	341,918	34,937	(D)	(D)	-	36,237	947	34,474	816	744	23
141	Dimension stone:												
	Establishments.....number..	21	21	20	1	19	-	1	-	1	-	-	-
	Employees.....do.....	389	389	(D)	(D)	(D)	-	(D)	-	(D)	-	-	-
	Value added in mining.....\$1,000..	3,609	3,609	(D)	(D)	(D)	-	(D)	-	(D)	-	-	-
142	Crushed and broken stone:												
	Establishments.....number..	40	39	4	-	4	-	34	-	34	-	1	1
	Employees.....do.....	880	(D)	(D)	-	(D)	-	727	-	727	-	(D)	(D)
	Value added in mining.....\$1,000..	10,911	(D)	(D)	-	(D)	-	10,077	-	10,077	-	(D)	(D)
144	Sand and gravel:												
	Establishments.....number..	258	252	39	-	39	-	211	-	205	6	2	6
	Employees.....do.....	1,960	1,933	(D)	-	(D)	-	1,750	-	1,683	67	(D)	27
	Value added in mining.....\$1,000	22,038	22,010	(D)	-	(D)	-	20,277	-	19,461	816	(D)	28
149	Misc. nonmetallic minerals:												
	Establishments.....number..	12	11	5	-	5	-	6	4	2	-	-	1
	Employees.....do.....	319	(D)	(D)	-	(D)	-	(D)	100	(D)	-	-	(D)
	Value added in mining.....\$1,000..	4,230	(D)	(D)	-	(D)	-	(D)	947	(D)	-	-	(D)
	New Hampshire:												
14	Nonmetallic minerals mining:												
	Establishments.....number..	32	32	4	-	4	-	28	-	28	-	-	-
	Employees.....do.....	217	217	18	-	18	-	199	-	199	-	-	-
	Value added in mining.....\$1,000..	2,184	2,184	165	-	165	-	2,019	-	2,019	-	-	-
144	Sand and gravel:												
	Establishments.....number..	25	25	2	-	2	-	23	-	23	-	-	-
	Employees.....do.....	154	154	(D)	-	(D)	-	(D)	-	(D)	-	-	-
	Value added in mining.....\$1,000..	1,761	1,761	(D)	-	(D)	-	(D)	-	(D)	-	-	-
	Vermont:												
14	Nonmetallic minerals mining:												
	Establishments.....number..	43	43	17	-	17	-	26	4	22	-	-	-
	Employees.....do.....	4846	4846	4258	-	4258	-	580	100	480	-	-	-
	Value added in mining.....\$1,000..	48,780	48,780	42,752	-	42,752	-	6,028	947	5,081	-	-	-

See footnotes at end of table.

TABLE 2C. Selected Statistics for Industry Groups, Except Service Industries, by Type of Operation and Geographic Area: 1963-Continued

Ind. code	Industry group, geographic area and item	All types of establishments, total	Producing establishments									Nonproducing establishments	
			Total	Mining only				Mines with preparation plants					Separately operated preparation plants
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
142	New England—Continued Vermont—Continued Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	7 95 1,027	7 95 1,027	1 (D) (D)	- (D) (D)	1 (D) (D)	- (D) (D)	6 (D) (D)	- (D) (D)	6 (D) (D)	- - -	- - -	- - -
144	Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	20 76 355	20 76 355	7 22 71	- - -	7 22 71	- - -	13 54 184	- - -	13 54 184	- - -	- - -	- - -
14	Massachusetts: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	128 1,469 16,902	125 1,448 16,874	16 148 1,351	- - -	16 148 1,351	- - -	107 (D) (D)	- - -	106 1 413 14 694	1 (D) (D)	2 (D) (D)	3 21 28
142	Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	13 393 4,575	13 393 4,575	3 (D) (D)	- (D) (D)	3 (D) (D)	- (D) (D)	9 (D) (D)	- (D) (D)	9 (D) (D)	- - -	1 (D) (D)	- - -
144	Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	109 1,026 11,876	106 1,005 11,848	8 (D) (D)	- (D) (D)	8 (D) (D)	- (D) (D)	97 (D) (D)	- (D) (D)	96 924 10 684	1 (D) (D)	1 (D) (D)	3 21 28
14	Rhode Island: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	20 *204 *2,018	19 (D) (D)	4 (D) (D)	- (D) (D)	4 (D) (D)	- (D) (D)	15 151 1,620	- (D) (D)	14 (D) (D)	1 (D) (D)	- - -	1 (D) (D)
144	Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	17 138 1,321	17 138 1,321	4 (D) (D)	- (D) (D)	4 (D) (D)	- (D) (D)	13 (D) (D)	- (D) (D)	12 80 811	1 (D) (D)	- - -	- - -
144	Connecticut: Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	54 423 5,826	52 (D) (D)	8 (D) (D)	- (D) (D)	8 (D) (D)	- (D) (D)	43 411 5 577	- (D) (D)	40 376 5 161	3 35 416	1 (D) (D)	2 (D) (D)
14	Middle Atlantic Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..	835 \$14,574 \$202,055	827 \$14,543 \$201,918	168 (D) (D)	6 (D) (D)	162 777 7,375	- (D) (D)	646 (D) (D)	8 778 19,847	611 (D) (D)	27 739 12,482	13 (D) (D)	8 31 137
142	Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..	276 7,402 109,545	274 (D) (D)	10 (D) (D)	1 (D) (D)	9 69 339	- (D) (D)	256 6,492 104,245	2 (D) (D)	252 6,359 102,476	2 (D) (D)	8 294 4,378	2 (D) (D)
144	Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..	418 4,520 61,410	414 4,512 61,410	65 210 2,278	- (D) (D)	65 210 2,278	- (D) (D)	346 3,956 57,476	- (D) (D)	321 3,507 49,109	24 464 8,367	3 106 1,656	4 8 ( <sup>2</sup> )
147	Chemical and fertilizer minerals: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..	8 1,309 15,872	8 1,309 15,872	2 (D) (D)	- (D) (D)	2 (D) (D)	- (D) (D)	4 573 15,229	3 (D) (D)	1 (D) (D)	- - -	2 (D) (D)	- - -
14	New York: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	317 \$5,489 \$83,884	314 (D) (D)	59 \$199 \$1,736	- (D) (D)	59 \$199 \$1,736	- (D) (D)	253 (D) (D)	6 (D) (D)	240 (D) (D)	7 258 3,155	2 (D) (D)	3 (D) (D)
142	Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	67 2,176 35,958	67 2,176 35,958	2 (D) (D)	- (D) (D)	2 (D) (D)	- (D) (D)	64 1,930 35,306	- (D) (D)	64 1,930 35,306	- - -	1 (D) (D)	- - -
144	Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	217 1,701 23,488	215 (D) (D)	43 (D) (D)	- (D) (D)	43 (D) (D)	- (D) (D)	171 1,485 22,331	- (D) (D)	165 (D) (D)	6 (D) (D)	1 (D) (D)	2 (D) (D)

See footnotes at end of table.

TABLE 2C. Selected Statistics for Industry Groups, Except Service Industries, by Type of Operation and Geographic Area: 1963—Continued

Ind. code	Industry group, geographic area and item	All types of establishments, total	Producing establishments									Separately operated preparation plants	Non-producing establishments
			Total	Mining only				Mines with preparation plants					
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
149	Middle Atlantic—Continued New York—Continued Misc. nonmetallic minerals: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..  New Jersey: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..  142 Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..  144 Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..  14 Pennsylvania: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..  142 Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..  144 Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..  145 Clay and related minerals: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..  East North Central 14 Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..  142 Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..  144 Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..  145 Clay and related minerals: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..  147 Chemical and fertilizer minerals: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..  149 Misc. nonmetallic minerals: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	14 530 7,829    150 2,964 45,995   30 1,522 25,184  107 1,353 19,822  368 6,121 72,176  179 3,704 48,403  94 1,468 18,100  42 290 3,796    1,875 21,591 290,301  466 9,305 130,419  1,232 9,027 123,570  48 628 7,142  15 1,775 18,297  54 494 7,795	13 (D) (D)    148 (D) (D)  30 (D) (D)  105 (D) (D)  365 (D) (D)  177 (D) (D)  94 1,468 18,100  42 290 3,796    1,860 21,548 290,134  462 9,294 130,432  1,228 9,003 123,726  48 628 7,142  15 1,775 18,297  52 (D) (D)	2 (D) (D)    22 (D) (D)  1 (D) (D)  16 (D) 151 1,538  85 (D) 455 4,535  7 (D) 322  6 (D) 28 247  33 (D) 218 3,082    357 1,335 (D)  17 (D) 110 1,126  221 (D) (D)  28 (D) 170 1,602  7 (D) (D)  1 (D) (D)  26 (D) (D)  26 (D) (D)  1 (D) (D)  1 (D) (D)  1 (D) (D)  25 (D) (D)  25 (D) (D)  25 (D) (D)  26 (D) (D)  									

See footnotes at end of table.

TABLE 2C. Selected Statistics for Industry Groups, Except Service Industries, by Type of Operation and Geographic Area: 1963—Continued

Ind. code	Industry group, geographic area and item	All types of establishments, total	Producing establishments										Non-producing establishments	
			Total	Mining only				Mines with preparation plants				Separately operated preparation plants		
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
East North Central—Continued														
Ohio:														
142	Crushed and broken stone:													
	Establishments.....number..	105	103	8	-	8	-	94	1	93	-	3	-	-
	Employees.....do.....	2,678	2,678	(D)	-	(D)	-	2,471	(D)	(D)	-	(D)	-	-
	Value added in mining...\$1,000..	35,578	35,578	(D)	-	(D)	-	34,318	(D)	(D)	-	(D)	-	-
144	Sand and gravel:													
	Establishments.....number..	326	326	54	-	54	-	270	-	249	21	2	-	-
	Employees.....do.....	2,546	2,546	(D)	-	(D)	-	2,251	-	(D)	(D)	(D)	-	-
	Value added in mining...\$1,000..	37,107	37,107	(D)	-	(D)	-	35,325	-	(D)	(D)	(D)	-	-
145	Clay and related minerals:													
	Establishments.....number..	27	27	19	1	18	-	8	-	8	-	-	-	-
	Employees.....do.....	349	349	117	(D)	(D)	-	232	-	232	-	-	-	-
	Value added in mining...\$1,000..	4,077	4,077	1,593	(D)	(D)	-	2,484	-	2,484	-	-	-	-
Indiana:														
14	Nonmetallic minerals mining:													
	Establishments.....number..	300	299	62	-	62	-	234	2	224	8	3	1	-
	Employees.....do.....	2,813	(D)	(D)	-	(D)	-	2,373	(D)	2,320	(D)	36	(D)	-
	Value added in mining...\$1,000..	36,207	(D)	(D)	-	(D)	-	32,067	(D)	31,725	(D)	535	(D)	-
142	Crushed and broken stone:													
	Establishments.....number..	82	82	-	-	-	-	80	1	77	2	2	-	-
	Employees.....do.....	1,371	1,371	-	-	-	-	(D)	(D)	1,206	(D)	(D)	-	-
	Value added in mining...\$1,000..	16,969	16,969	-	-	-	-	(D)	(D)	16,074	(D)	(D)	-	-
144	Sand and gravel:													
	Establishments.....number..	192	192	43	-	43	-	148	-	142	6	1	-	-
	Employees.....do.....	1,186	1,186	(D)	-	(D)	-	1,092	-	1,049	43	(D)	-	-
	Value added in mining...\$1,000..	16,007	16,007	(D)	-	(D)	-	14,987	-	14,660	327	(D)	-	-
Illinois:														
142	Crushed and broken stone:													
	Establishments.....number..	150	149	3	-	3	-	144	7	137	-	2	1	-
	Employees.....do.....	2,478	(D)	(D)	-	(D)	-	2,335	290	2,045	-	(D)	(D)	-
	Value added in mining...\$1,000..	38,445	(D)	(D)	-	(D)	-	38,018	3,625	34,393	-	(D)	(D)	-
144	Sand and gravel:													
	Establishments.....number..	209	208	39	-	38	1	169	-	145	24	-	1	-
	Employees.....do.....	2,150	(D)	(D)	-	104	(D)	1,982	-	(D)	(D)	-	(D)	-
	Value added in mining...\$1,000..	27,322	(D)	(D)	-	1,085	(D)	26,095	-	(D)	(D)	-	(D)	-
Michigan:														
14	Nonmetallic minerals mining:													
	Establishments.....number..	366	364	69	1	68	-	295	2	282	11	-	2	-
	Employees.....do.....	63,877	(D)	232	(D)	(D)	-	(D)	(D)	3,083	(D)	-	(D)	-
	Value added in mining...\$1,000..	63,310	(D)	2,846	(D)	(D)	-	(D)	(D)	53,029	(D)	-	(D)	-
142	Crushed and broken stone:													
	Establishments.....number..	44	44	1	-	1	-	43	1	42	-	-	-	-
	Employees.....do.....	1,364	1,364	(D)	-	(D)	-	(D)	(D)	(D)	-	-	-	-
	Value added in mining...\$1,000..	23,336	23,336	(D)	-	(D)	-	(D)	(D)	(D)	-	-	-	-
144	Sand and gravel:													
	Establishments.....number..	284	283	48	-	48	-	235	-	225	10	-	1	-
	Employees.....do.....	1,915	(D)	125	-	125	-	(D)	-	1,652	(D)	-	(D)	-
	Value added in mining...\$1,000..	27,996	(D)	1,367	-	1,367	-	(D)	-	26,143	(D)	-	(D)	-
Wisconsin:														
14	Nonmetallic minerals mining:													
	Establishments.....number..	333	328	67	-	67	-	260	-	252	8	1	5	-
	Employees.....do.....	62,768	62,746	221	-	221	-	(D)	-	2,453	(D)	(D)	22	-
	Value added in mining...\$1,000..	632,022	632,018	2,303	-	2,303	-	(D)	-	27,761	(D)	(D)	4	-
142	Crushed and broken stone:													
	Establishments.....number..	85	84	7	-	7	-	77	-	77	-	-	1	-
	Employees.....do.....	1,414	(D)	(D)	-	(D)	-	1,383	-	1,383	-	-	(D)	-
	Value added in mining...\$1,000..	16,081	(D)	(D)	-	(D)	-	15,989	-	15,989	-	-	(D)	-
144	Sand and gravel:													
	Establishments.....number..	221	219	37	-	37	-	181	-	173	8	1	2	-
	Employees.....do.....	1,230	(D)	95	-	95	-	1,115	-	(D)	(D)	(D)	(D)	-
	Value added in mining...\$1,000..	15,138	(D)	1,415	-	1,415	-	13,413	-	(D)	(D)	(D)	(D)	-
West North Central														
14	Nonmetallic minerals mining:													
	Establishments.....number..	1,374	1,360	222	1	221	-	1,128	18	1,027	83	10	14	-
	Employees.....do.....	11,478	(D)	827	(D)	(D)	-	(D)	(D)	8,665	1,176	(D)	(D)	-
	Value added in mining...\$1,000..	129,995	(D)	10,616	(D)	(D)	-	(D)	(D)	100,308	13,231	645	(D)	-

See footnotes at end of table.

TABLE 2C. Selected Statistics for Industry Groups, Except Service Industries, by Type of Operation and Geographic Area: 1963—Continued

Ind. code	Industry group, geographic area and item	All types of establishments, total	Producing establishments										Nonproducing establishments
			Total	Mining only				Mines with preparation plants				Separately operated preparation plants	
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
142	West North Central—Continued Crushed and broken stone:												
	Establishments.....number..	428	421	29	-	29	-	389	16	366	7	3	7
	Employees.....do.....	5,691	15,635	193	-	193	-	5,274	305	4,532	437	33	56
	Value added in mining....\$1,000..	64,566	64,745	3,871	-	3,871	-	60,429	3,987	52,590	3,852	445	( <sup>2</sup> )
144	Sand and gravel:												
	Establishments.....number..	831	825	113	-	113	-	710	-	634	76	7	6
	Employees.....do.....	4,590	(D)	(D)	-	(D)	-	4,193	-	3,460	733	13	(D)
	Value added in mining....\$1,000..	50,341	(D)	(D)	-	(D)	-	48,061	-	38,682	9,379	200	(D)
145	Clay and related minerals:												
	Establishments.....number..	50	50	34	-	34	-	16	-	16	-	-	-
	Employees.....do.....	381	381	77	-	77	-	304	-	304	-	-	-
	Value added in mining....\$1,000..	6,841	6,841	2,227	-	2,227	-	4,614	-	4,614	-	-	-
147	Chemical and fertilizer minerals:												
	Establishments.....number..	20	19	8	-	8	-	11	2	9	-	-	1
	Employees.....do.....	(D)	(D)	(D)	-	(D)	-	394	(D)	(D)	-	-	(D)
	Value added in mining....\$1,000..	(D)	(D)	(D)	-	(D)	-	4,690	(D)	(D)	-	-	(D)
14	Minnesota:												
	Nonmetallic minerals mining:												
	Establishments.....number..	257	256	59	-	59	-	197	-	190	7	-	1
	Employees.....do.....	(D)	(D)	(D)	-	(D)	-	1,495	-	(D)	(D)	-	(D)
	Value added in mining....\$1,000..	(D)	(D)	(D)	-	(D)	-	15,537	-	(D)	(D)	-	(D)
142	Crushed and broken stone:												
	Establishments.....number..	27	27	-	-	-	-	27	-	27	-	-	-
	Employees.....do.....	399	399	-	-	-	-	399	-	399	-	-	-
	Value added in mining....\$1,000..	4,174	4,174	-	-	-	-	4,174	-	4,174	-	-	-
144	Sand and gravel:												
	Establishments.....number..	209	208	41	-	41	-	167	-	160	7	-	1
	Employees.....do.....	1,182	(D)	(D)	-	(D)	-	1,048	-	(D)	(D)	-	(D)
	Value added in mining....\$1,000..	11,518	(D)	(D)	-	(D)	-	10,768	-	(D)	(D)	-	(D)
14	Iowa:												
	Nonmetallic minerals mining:												
	Establishments.....number..	253	252	24	-	24	-	225	1	212	10	3	1
	Employees.....do.....	<sup>2</sup> 2,372	(D)	110	-	110	-	(D)	(D)	1,981	110	(D)	(D)
	Value added in mining....\$1,000..	<sup>2</sup> 29,730	(D)	1,695	-	1,695	-	(D)	(D)	25,962	1,038	(D)	(D)
142	Crushed and broken stone:												
	Establishments.....number..	115	114	5	-	5	-	108	1	104	1	1	1
	Employees.....do.....	1,600	(D)	72	-	72	-	(D)	(D)	1,332	(D)	(D)	(D)
	Value added in mining....\$1,000..	20,543	(D)	1,416	-	1,416	-	(D)	(D)	17,699	(D)	(D)	(D)
144	Sand and gravel:												
	Establishments.....number..	132	132	16	-	16	-	114	-	105	9	2	-
	Employees.....do.....	716	716	27	-	27	-	(D)	-	615	(D)	(D)	-
	Value added in mining....\$1,000..	8,793	8,793	212	-	212	-	(D)	-	7,919	(D)	(D)	-
14	Missouri:												
	Nonmetallic minerals mining:												
	Establishments.....number..	319	315	60	1	59	-	250	12	213	25	2	5
	Employees.....do.....	3,771	3,734	314	(D)	(D)	-	(D)	(D)	2,532	649	(D)	28
	Value added in mining....\$1,000..	44,951	44,977	4,840	(D)	(D)	-	(D)	(D)	29,519	7,494	(D)	( <sup>2</sup> )
142	Crushed and broken stone:												
	Establishments.....number..	171	168	10	-	10	-	156	12	138	6	2	3
	Employees.....do.....	2,482	(D)	(D)	-	(D)	-	(D)	(D)	1,750	397	(D)	(D)
	Value added in mining....\$1,000..	27,081	(D)	(D)	-	(D)	-	(D)	(D)	19,073	3,421	(D)	(D)
144	Sand and gravel:												
	Establishments.....number..	93	92	15	-	15	-	77	-	58	19	-	1
	Employees.....do.....	679	(D)	(D)	-	(D)	-	621	-	369	252	-	(D)
	Value added in mining....\$1,000..	9,830	(D)	(D)	-	(D)	-	9,684	-	5,611	4,073	-	(D)
147	Chemical and fertilizer minerals:												
	Establishments.....number..	17	16	7	-	7	-	9	-	9	-	-	1
	Employees.....do.....	371	(D)	(D)	-	(D)	-	305	-	305	-	-	(D)
	Value added in mining....\$1,000..	3,779	(D)	(D)	-	(D)	-	3,249	-	3,249	-	-	(D)
142	Nebraska:												
	Crushed and broken stone:												
	Establishments.....number..	24	24	1	-	1	-	23	-	23	-	-	-
	Employees.....do.....	290	290	(D)	-	(D)	-	(D)	-	(D)	-	-	-
	Value added in mining....\$1,000..	2,855	2,855	(D)	-	(D)	-	(D)	-	(D)	-	-	-

See footnotes at end of table.



**TABLE 2C. Selected Statistics for Industry Groups, Except Service Industries, by Type of Operation and Geographic Area: 1963—Continued**

Ind. code	Industry group, geographic area and item	All types of establishments, total	Producing establishments									Separately operated preparation plants	Non-producing establishments
			Total	Mining only				Mines with preparation plants					
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
144	West North Central—Continued Nebraska—Continued Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	  162 887 8,669	  (D) (D)	  (D) (D)	  - -	  (D) (D)	  - -	  148 790 8,401	  - -	  126 637 6,863	  22 153 1,538	  - -	  (D) (D) (D)
14	Kansas: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	  223 1,570 17,435	  220 11,548 17,435	  (D) (D)	  - -	  (D) (D)	  - -	  183 (D) (D)	  3 (D) (D)	  167 (D) (D)	  16 181 2,263	  3 12 109	  3 22 -
142	Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	  84 797 9,017	  (D) (D)	  (D) (D)	  - -	  (D) (D)	  - -	  70 751 8,874	  (D) (D)	  (D) (D)	  - -	  - -	  (D) (D) (D)
144	Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	  128 580 6,504	  (D) (D)	  (D) (D)	  - -	  (D) (D)	  - -	  108 511 5,857	  - -	  92 330 3,594	  16 181 2,263	  3 12 109	  (D) (D) (D)
14	South Atlantic Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	  888 22,434 310,558	  873 22,357 309,370	  155 907 10,150	  (D) (D)	  152 (D) (D)	  (D) (D)	  702 20,247 278,115	  11 614 7,057	  646 18,648 258,567	  45 985 12,491	  16 684 21,105	  13 77 1,188
142	Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	  343 8,997 119,744	  343 8,997 119,744	  15 177 3,387	  - -	  15 177 3,387	  - -	  317 8,279 111,982	  10 (D) (D)	  304 7,567 103,102	  3 (D) (D)	  10 244 4,375	  - - -
144	Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	  357 4,366 51,869	  352 4,348 51,879	  68 239 2,831	  - -	  (D) (D)	  (D) (D)	  284 3,964 49,048	  - -	  244 3,269 40,030	  40 695 9,038	  - -	  5 18 (2)
145	Clay and related minerals: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	  63 4,249 59,311	  59 4,219 58,576	  13 85 757	  - -	  13 85 757	  - -	  46 4,134 57,819	  - -	  46 4,134 57,819	  - -	  - -	  4 30 735
147	Chemical and fertilizer minerals: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	  40 3,557 69,854	  38 (D) (D)	  7 (D) (D)	  1 (D) (D)	  6 (D) (D)	  - -	  25 2,908 50,948	  - -	  25 2,908 50,948	  - -	  6 440 16,730	  2 (D) (D)
14	Delaware and Maryland: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	  109 1,944 30,765	  107 (D) (D)	  20 (D) (D)	  - -	  18 (D) (D)	  2 (D) (D)	  88 (D) (D)	  1 (D) (D)	  83 (D) (D)	  2 (D) (D)	  1 (D) (D)	  2 (D) (D)
142	Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	  28 706 13,293	  28 706 13,293	  1 (D) (D)	  - -	  1 (D) (D)	  - -	  27 (D) (D)	  1 (D) (D)	  27 (D) (D)	  - -	  - -	  - -
144	Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	  67 1,109 15,876	  66 (D) (D)	  10 (D) (D)	  - -	  10 (D) (D)	  - -	  56 853 13,144	  - -	  54 (D) (D)	  2 (D) (D)	  - -	  1 (D) (D)
14	Virginia: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	  157 3,703 41,528	  157 3,703 41,528	  13 (D) (D)	  - -	  13 (D) (D)	  - -	  142 (D) (D)	  1 (D) (D)	  130 (D) (D)	  11 233 2,735	  2 (D) (D)	  - -
142	Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	  95 2,326 28,809	  95 2,326 28,809	  3 (D) (D)	  - -	  3 (D) (D)	  - -	  90 2,186 26,532	  1 (D) (D)	  88 (D) (D)	  1 (D) (D)	  2 (D) (D)	  - -

See footnotes at end of table.

TABLE 2C. Selected Statistics for Industry Groups, Except Service Industries, by Type of Operation and Geographic Area: 1963—Continued

Ind. code	Industry group, geographic area and item	All types of establishments, total	Producing establishments										Non-producing establishments
			Total	Mining only				Mines with preparation plants				Separately operated preparation plants	
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
144	South Atlantic—Continued												
	Virginia—Continued												
	Sand and gravel:												
	Establishments.....number..	50	50	6	-	6	-	44	-	34	10	-	-
	Employees.....do.....	760	760	14	-	14	-	(D)	-	563	(D)	-	-
	Value added in mining...\$1,000..	8,407	8,407	134	-	134	-	(D)	-	6,404	(D)	-	-
14	West Virginia:												
	Nonmetallic minerals mining:												
	Establishments.....number..	60	59	6	-	6	-	53	3	43	7	-	1
	Employees.....do.....	41,296	(D)	(D)	-	(D)	-	1,166	119	856	191	-	(D)
	Value added in mining...\$1,000..	416,410	(D)	(D)	-	(D)	-	15,302	1,172	10,401	3,729	-	(D)
142	Crushed and broken stone:												
	Establishments.....number..	37	37	4	-	4	-	33	3	29	1	-	-
	Employees.....do.....	593	593	14	-	14	-	579	119	(D)	(D)	-	-
	Value added in mining...\$1,000..	7,030	7,030	563	-	563	-	6,467	1,172	(D)	(D)	-	-
144	Sand and gravel:												
	Establishments.....number..	20	20	1	-	1	-	18	-	12	6	-	-
	Employees.....do.....	656	656	(D)	-	(D)	-	(D)	-	(D)	(D)	-	-
	Value added in mining...\$1,000..	9,112	9,112	(D)	-	(D)	-	(D)	-	(D)	(D)	-	-
142	North Carolina:												
	Crushed and broken stone:												
	Establishments.....number..	52	52	2	-	2	-	49	-	49	-	1	-
	Employees.....do.....	1,135	1,135	(D)	-	(D)	-	1,033	-	1,033	-	(D)	-
	Value added in mining...\$1,000..	16,481	16,481	(D)	-	(D)	-	16,344	-	16,344	-	(D)	-
144	Sand and gravel:												
	Establishments.....number..	61	60	10	-	10	-	50	-	47	3	-	1
	Employees.....do.....	514	(D)	22	-	22	-	(D)	-	486	(D)	-	(D)
	Value added in mining...\$1,000..	6,210	(D)	189	-	189	-	(D)	-	5,972	(D)	-	(D)
145	Clay and related minerals:												
	Establishments.....number..	13	10	4	-	4	-	6	-	6	-	-	3
	Employees.....do.....	275	250	22	-	22	-	228	-	228	-	-	25
	Value added in mining...\$1,000..	3,203	3,193	346	-	346	-	2,847	-	2,847	-	-	10
149	Misc. nonmetallic minerals:												
	Establishments.....number..	25	23	8	-	8	-	15	1	13	1	-	2
	Employees.....do.....	417	(D)	33	-	33	-	(D)	(D)	(D)	(D)	-	(D)
	Value added in mining...\$1,000..	3,603	(D)	226	-	226	-	(D)	(D)	(D)	(D)	-	(D)
14	Georgia:												
	Nonmetallic minerals mining:												
	Establishments.....number..	142	140	50	-	49	1	88	4	78	6	2	2
	Employees.....do.....	65,518	(D)	(D)	-	(D)	(D)	5,075	(D)	(D)	200	(D)	(D)
	Value added in mining...\$1,000..	674,402	(D)	(D)	-	(D)	(D)	70,179	(D)	(D)	2,117	(D)	(D)
142	Crushed and broken stone:												
	Establishments.....number..	37	37	-	-	-	-	36	4	31	1	1	-
	Employees.....do.....	1,789	1,789	-	-	-	-	(D)	(D)	1,351	(D)	(D)	-
	Value added in mining...\$1,000..	23,166	23,166	-	-	-	-	(D)	(D)	16,014	(D)	(D)	-
144	Sand and gravel:												
	Establishments.....number..	50	50	25	-	24	1	25	-	21	4	-	-
	Employees.....do.....	354	354	(D)	-	(D)	(D)	(D)	-	161	(D)	-	-
	Value added in mining...\$1,000..	2,995	2,995	(D)	-	(D)	(D)	(D)	-	1,563	(D)	-	-
145	Clay and related minerals:												
	Establishments.....number..	27	27	6	-	6	-	21	-	21	-	-	-
	Employees.....do.....	2,966	2,966	51	-	51	-	2,915	-	2,915	-	-	-
	Value added in mining...\$1,000..	44,415	44,415	295	-	295	-	44,120	-	44,120	-	-	-
14	Florida:												
	Nonmetallic minerals mining:												
	Establishments.....number..	195	192	26	1	24	1	155	-	147	8	11	3
	Employees.....do.....	5,850	5,836	236	(D)	(D)	(D)	4,861	-	4,821	40	571	14
	Value added in mining...\$1,000..	97,793	97,799	3,376	(D)	(D)	(D)	75,882	-	75,626	256	18,541	(2)
142	Crushed and broken stone:												
	Establishments.....number..	76	76	4	-	4	-	66	-	66	-	6	-
	Employees.....do.....	1,671	1,671	27	-	27	-	1,380	-	1,380	-	139	-
	Value added in mining...\$1,000..	21,691	21,691	308	-	308	-	19,352	-	19,352	-	2,031	-
144	Sand and gravel:												
	Establishments.....number..	76	73	11	-	10	1	62	-	54	8	-	3
	Employees.....do.....	633	633	63	-	(D)	(D)	556	-	511	40	-	14
	Value added in mining...\$1,000..	5,862	5,868	1,049	-	(D)	(D)	4,819	-	4,563	256	-	(2)

See footnotes at end of table.

**TABLE 2C. Selected Statistics for Industry Groups, Except Service Industries, by Type of Operation and Geographic Area: 1963—Continued**

Ind. code	Industry group, geographic area and item	All types of establishments, total	Producing establishments									Non-producing establishments	
			Total	Mining only				Mines with preparation plants					Separately operated preparation plants
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
147	South Atlantic—Continued Florida—Continued Chemical and fertilizer minerals: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..  East South Central	28 13,219 66,121	28 3,219 66,121	5 129 1,865	1 (D) (D)	4 (D) (D)	- - -	18 2,616 47,746	- - -	18 2,616 47,746	- - -	5 432 16,510	- - -
14	Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..  142 Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..  144 Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..  145 Clay and related minerals: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..  147 Chemical and fertilizer minerals: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..  14 Kentucky: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..  142 Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..  144 Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..  14 Tennessee: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..  142 Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..  144 Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..  145 Clay and related minerals: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..  14 Alabama: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..  142 Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining....\$1,000..	529 9,606 126,078	526 9,598 126,190	93 721 5,512	2 (D) (D)	89 680 5,338	2 (D) (D)	423 8,790 118,523	22 1,197 16,231	368 6,819 95,731	33 774 6,738	10 137 1,705	9 8 (2)
					</								

See footnotes at end of table.

TABLE 2C. Selected Statistics for Industry Groups, Except Service Industries, by Type of Operation and Geographic Area: 1963—Continued

Ind. code	Industry group, geographic area and item	All types of establishments, total	Producing establishments									Non-producing establishments	
			Total	Mining only				Mines with preparation plants					Separately operated preparation plants
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
144	East South Central—Continued Alabama—Continued Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	49 612 5,285	49 602 5,285	10 58 533	- - -	9 (D) (D)	1 (D) (D)	39 544 4,752	- - -	31 (D) (D)	8 (D) (D)	- - -	- - -
14	Mississippi: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	66 4864 47,965	66 4864 47,965	13 (D) (D)	- - -	13 (D) (D)	- (D) -	52 (D) (D)	- - -	47 675 7,033	5 (D) (D)	1 (D) (D)	- - -
144	Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	53 651 4,871	53 651 4,871	7 (D) (D)	- - -	7 (D) (D)	- - -	45 637 4,964	- - -	40 (D) (D)	5 (D) (D)	1 (D) (D)	- - -
14	West South Central Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	655 612,782 6221,701	642 612,656 6221,672	165 61,946 677,709	- - -	153 668 3,983	12 61,278 673,726	465 9,522 141,354	8 711 14,066	412 6,877 81,544	45 1,934 45,744	12 187 2,609	13 126 29
142	Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	100 3,018 37,442	95 (D) (D)	8 76 761	- - -	8 76 761	- - -	85 (D) (D)	2 (D) (D)	83 2,690 34,957	- - -	2 (D) (D)	5 (D) (D)
144	Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	423 4,494 47,677	416 4,433 48,015	81 327 3,484	- - -	77 322 3,231	4 5 253	329 4,040 43,458	- - -	291 3,407 38,155	38 633 5,303	6 66 1,073	7 61 (2)
145	Clay and related minerals: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	40 388 4,031	40 388 4,031	25 57 405	- - -	25 57 405	- - -	15 331 3,626	- - -	15 331 3,626	- - -	- - -	- - -
147	Chemical and fertilizer minerals: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	29 4,158 126,382	29 4,158 126,382	11 1,278 71,922	- - -	3 (D) (D)	8 (D) (D)	15 2,009 53,752	5 637 13,057	3 71 254	7 1,301 40,441	3 63 708	- - -
149	Misc. nonmetallic minerals: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	34 479 4,661	33 (D) (D)	11 19 258	- - -	11 19 258	- - -	21 (D) (D)	1 (D) (D)	20 421 4,292	- - -	1 (D) (D)	1 (D) (D)
14	Arkansas: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	103 61,831 623,773	99 61,823 623,778	31 (D) (D)	- - -	31 (D) (D)	- - -	66 1,760 23,360	3 (D) (D)	54 1,307 18,162	9 (D) (D)	2 (D) (D)	4 (2)
14	Louisiana: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	102 3,309 82,821	101 (D) (D)	23 1,223 52,276	- - -	16 135 1,524	7 1,088 50,752	75 2,031 29,617	4 577 12,101	60 (D) (D)	11 (D) (D)	3 (D) (D)	1 (D) (D)
144	Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	87 1,205 12,214	86 (D) (D)	17 (D) (D)	- - -	14 (D) (D)	3 (D) (D)	67 1,068 10,143	- - -	57 887 8,886	10 181 1,257	2 (D) (D)	1 (D) (D)
147	Chemical and fertilizer minerals: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	10 1,954 69,512	10 1,954 69,512	4 (D) (D)	- - -	- - -	4 (D) (D)	5 (D) (D)	4 577 12,101	- - -	1 (D) (D)	1 (D) (D)	- - -
14	Oklahoma: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	110 61,265 615,006	108 (D) (D)	27 (D) (D)	- - -	27 (D) (D)	- - -	79 1,013 13,216	- - -	65 852 11,686	14 161 1,530	2 (D) (D)	2 (D) (D)

See footnotes at end of table.

**TABLE 2C. Selected Statistics for Industry Groups, Except Service Industries, by Type of Operation and Geographic Area: 1963—Continued**

Ind. code	Industry group, geographic area and item	All types of establishments, total	Producing establishments									Non-producing establishments	
			Total	Mining only				Mines with preparation plants					Separately operated preparation plants
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
142	West South Central--Continued Oklahoma--Continued Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	32 766 8,655	31 (D) (D)	4 (D) (D)	- - -	4 (D) (D)	- - -	26 639 7,963	- - -	26 639 7,963	- - -	1 (D) (D)	1 (D) (D)
144	Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	56 385 5,038	55 (D) (D)	11 (D) (D)	- - -	11 (D) (D)	- - -	44 338 4,750	- - -	30 177 3,220	14 161 1,530	- - -	1 (D) (D)
14	Texas: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	340 76,377 99,926	334 76,272 99,889	85 879 24,383	- - -	80 (D) (D)	5 (D) (D)	244 4,708 74,648	1 (D) (D)	232 3,695 41,717	11 (D) (D)	5 73 858	6 74 37
142	Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	44 1,335 13,833	43 (D) (D)	2 (D) (D)	- - -	2 (D) (D)	- - -	41 1,255 13,514	- - -	41 1,255 13,514	- - -	- - -	1 (D) (D)
144	Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	223 2,438 25,878	219 (D) (D)	42 135 1,426	- - -	41 (D) (D)	1 (D) (D)	174 2,054 23,362	- - -	167 1,845 21,590	7 209 1,772	3 (D) (D)	4 (D) (D)
149	Misc. nonmetallic minerals: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	18 351 3,708	17 (D) (D)	4 11 88	- - -	4 11 88	- - -	13 (D) (D)	- - -	13 (D) (D)	- - -	- - -	1 (D) (D)
14	Mountain Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	687 10,407 176,842	662 10,179 177,252	159 (D) (D)	13 (D) (D)	145 518 6,650	1 (D) (D)	496 (D) (D)	24 4,920 101,303	445 (D) (D)	27 326 4,034	10 86 993	25 124 (2)
142	Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	82 646 7,841	81 (D) (D)	4 18 373	- - -	4 18 373	- - -	75 (D) (D)	2 (D) (D)	72 537 6,689	1 (D) (D)	2 (D) (D)	1 (D) (D)
144	Sand and gravel: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	342 2,428 28,213	336 2,412 28,360	30 92 938	- - -	30 92 938	- - -	306 2,238 27,422	- - -	282 2,075 25,741	24 163 1,681	3 35 294	6 16 (2)
145	Clay and related minerals: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	61 824 11,970	61 824 11,970	41 222 2,039	3 (D) (D)	37 (D) (D)	1 (D) (D)	20 602 9,931	- - -	20 602 9,931	- - -	- - -	- - -
147	Chemical and fertilizer minerals: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	62 5,383 113,103	53 5,273 113,509	20 509 5,497	4 412 3,559	16 97 1,938	- (D) -	31 (D) (D)	13 4,223 97,102	16 330 8,134	2 (D) (D)	2 (D) (D)	9 93 (2)
149	Misc. nonmetallic minerals: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	119 1,029 15,346	110 (D) (D)	43 125 2,044	6 18 84	37 107 1,960	- - -	64 889 13,182	9 (D) (D)	55 (D) (D)	- - -	3 (D) (D)	9 (D) (D)
14	Montana: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	70 908 (D)	67 (D) (D)	15 (D) (D)	2 (D) (D)	13 (D) (D)	- - -	52 545 6,360	3 (D) (D)	40 386 4,738	9 (D) (D)	- - -	3 (D) (D)
147	Chemical and fertilizer minerals: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	6 477 4,563	5 (D) (D)	1 (D) (D)	1 (D) (D)	- - -	- - -	4 (D) (D)	2 (D) (D)	1 (D) (D)	1 (D) (D)	- - -	1 (D) (D)
14	Idaho: Nonmetallic minerals mining: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	58 6485 68,765	57 (D) (D)	11 88 1,523	- - -	11 88 1,523	- - -	46 (D) (D)	- - -	43 304 6,372	3 (D) (D)	- - -	1 (D) (D)

See footnotes at end of table.

TABLE 2C. Selected Statistics for Industry Groups, Except Service Industries, by Type of Operation and Geographic Area: 1963—Continued

Ind. code	Industry group, geographic area and item	All types of establishments, total	Producing establishments									Non-producing establishments		
			Total	Mining only				Mines with preparation plants					Separately operated preparation plants	
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
Mountain--Continued														
14	Wyoming:													
	Nonmetallic minerals mining:													
	Establishments.....number..	53	52	6	1	5	-	46	3	43	-	1	1	
	Employees.....do.....	<sup>6</sup> 1,278	<sup>6</sup> 1,278	(D)	(D)	(D)	-	1,256	627	629	-	(D)	(D)	
	Value added in mining...\$1,000..	<sup>6</sup> 24,916	<sup>6</sup> 24,916	(D)	(D)	(D)	-	24,609	15,042	9,567	-	(D)	(D)	
14	Colorado:													
	Nonmetallic minerals mining:													
	Establishments.....number..	164	161	46	3	43	-	115	3	104	8	1	(D)	
	Employees.....do.....	1,166	(D)	(D)	(D)	(D)	-	1,005	104	805	96	(D)	(D)	
	Value added in mining...\$1,000..	13,362	(D)	(D)	(D)	(D)	-	12,192	879	10,188	1,125	(D)	( <sup>2</sup> )	
144	Sand and gravel:													
	Establishments.....number..	89	87	7	-	7	-	80	-	73	7	-	2	
	Employees.....do.....	601	(D)	(D)	-	(D)	-	564	-	(D)	(D)	-	(D)	
	Value added in mining...\$1,000..	8,115	(D)	(D)	-	(D)	-	7,935	-	(D)	(D)	-	(D)	
14	New Mexico:													
	Nonmetallic minerals mining:													
	Establishments.....number..	91	86	17	-	17	-	64	6	55	3	5	5	
	Employees.....do.....	4,052	<sup>14</sup> ,041	56	-	56	-	(D)	3,496	377	(D)	(D)	11	
	Value added in mining...\$1,000..	87,635	(D)	659	-	659	-	(D)	81,130	4,633	(D)	(D)	(D)	
147	Chemical and fertilizer minerals:													
	Establishments.....number..	17	14	5	-	5	-	7	6	1	-	2	3	
	Employees.....do.....	3,553	(D)	4	-	4	-	(D)	3,496	(D)	-	(D)	(D)	
	Value added in mining...\$1,000..	81,673	81,669	108	-	108	-	(D)	81,130	(D)	-	(D)	4	
14	Arizona:													
	Nonmetallic minerals mining:													
	Establishments.....number..	84	81	16	-	16	-	63	4	58	3	2	3	
	Employees.....do.....	<sup>4</sup> 929	(D)	(D)	-	(D)	-	(D)	(D)	646	(D)	(D)	(D)	
	Value added in mining...\$1,000..	49,761	(D)	(D)	-	(D)	-	(D)	(D)	7,310	(D)	(D)	(D)	
144	Sand and gravel:													
	Establishments.....number..	37	37	3	-	3	-	34	-	33	1	-	-	
	Employees.....do.....	594	594	4	-	4	-	590	-	(D)	(D)	-	-	
	Value added in mining...\$1,000..	6,189	6,189	120	-	120	-	6,069	-	(D)	(D)	-	-	
14	Utah:													
	Nonmetallic minerals mining:													
	Establishments.....number..	82	79	13	2	10	1	66	3	61	2	-	3	
	Employees.....do.....	<sup>6</sup> 1,161	1,052	231	(D)	(D)	(D)	821	187	(D)	(D)	-	(D)	
	Value added in mining...\$1,000..	(D)	13,312	1,385	(D)	(D)	(D)	11,927	3,543	(D)	(D)	-	(D)	
144	Sand and gravel:													
	Establishments.....number..	39	41	-	-	-	-	41	-	40	1	-	-	
	Employees.....do.....	333	333	-	-	-	-	333	-	(D)	(D)	-	-	
	Value added in mining...\$1,000..	3,758	3,758	-	-	-	-	3,758	-	(D)	(D)	-	-	
14	Nevada:													
	Nonmetallic minerals mining:													
	Establishments.....number..	85	79	33	3	30	-	45	2	42	1	1	6	
	Employees.....do.....	<sup>4</sup> 572	(D)	60	5	52	-	(D)	(D)	475	(D)	(D)	(D)	
	Value added in mining...\$1,000..	<sup>4</sup> 10,983	(D)	987	47	940	-	(D)	(D)	9,760	(D)	(D)	(D)	
149	Misc. nonmetallic minerals:													
	Establishments.....number..	23	20	8	3	5	-	12	1	11	-	-	3	
	Employees.....do.....	176	176	12	5	7	-	164	(D)	(D)	-	-	-	
	Value added in mining...\$1,000..	3,775	3,784	221	47	147	-	3,563	(D)	(D)	-	-	( <sup>2</sup> )	
Pacific														
14	Nonmetallic minerals mining:													
	Establishments.....number..	1,116	1,077	270	17	234	17	798	6	686	106	9	39	
	Employees.....do.....	<sup>6</sup> 13,880	<sup>6</sup> 13,797	(D)	(D)	(D)	(D)	<sup>6</sup> 12,244	128	<sup>6</sup> 9,481	2,635	(D)	83	
	Value added in mining...\$1,000..	<sup>6</sup> 236,774	<sup>6</sup> 236,788	(D)	(D)	(D)	(D)	<sup>6</sup> 224,277	910	<sup>6</sup> 180,592	42,775	(D)	( <sup>2</sup> )	
142	Crushed and broken stone:													
	Establishments.....number..	298	289	37	-	37	-	243	3	240	-	9	9	
	Employees.....do.....	2,668	2,660	(D)	-	(D)	-	2,416	93	2,323	-	(D)	8	
	Value added in mining...\$1,000..	38,025	38,020	(D)	-	(D)	-	33,871	658	33,213	-	(D)	5	
144	Sand and gravel:													
	Establishments.....number..	568	558	97	-	80	17	461	-	358	103	-	10	
	Employees.....do.....	6,452	6,413	309	-	261	48	6,104	-	(D)	(D)	-	39	
	Value added in mining...\$1,000..	105,449	105,460	4,157	-	3,659	498	101,703	-	(D)	(D)	-	( <sup>2</sup> )	

See footnotes at end of table.

TABLE 2C. Selected Statistics for Industry Groups, Except Service Industries, by Type of Operation and Geographic Area: 1963—Continued

Ind. code	Industry group, geographic area and item	All types of establishments, total	Producing establishments									Nonproducing establishments		
			Total	Mining only				Mines with preparation plants					Separately operated preparation plants	
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods			
Pacific--Continued														
149	Misc. nonmetallic minerals:													
	Establishments.....number..	128	121	55	14	40	1	66	-	66	-	-	7	
	Employees.....do.....	1,317	1,342	126	(D)	56	(D)	1,216	-	1,216	-	-	5	
	Value added in mining...\$1,000..	26,375	26,335	2,126	(D)	933	(D)	24,209	-	24,209	-	-	40	
Washington:														
14	Nonmetallic minerals mining:													
	Establishments.....number..	176	171	43	1	39	3	126	2	113	11	2	5	
	Employees.....do.....	41,032	41,028	(D)	(D)	(D)	(D)	928	(D)	(D)	(D)	(D)	4	
	Value added in mining...\$1,000..	(D)	(D)	(D)	(D)	(D)	(D)	14,184	(D)	(D)	(D)	(D)	28	
142	Crushed and broken stone:													
	Establishments.....number..	52	50	3	-	3	-	45	2	43	-	2	2	
	Employees.....do.....	309	(D)	3	-	3	-	(D)	(D)	276	-	(D)	(D)	
	Value added in mining...\$1,000..	4,243	(D)	26	-	26	-	(D)	(D)	3,825	-	(D)	(D)	
144	Sand and gravel:													
	Establishments.....number..	91	90	20	-	17	3	70	-	59	11	-	1	
	Employees.....do.....	494	(D)	(D)	-	15	(D)	477	-	(D)	(D)	-	(D)	
	Value added in mining...\$1,000..	7,661	(D)	(D)	-	211	(D)	7,438	-	(D)	(D)	-	(D)	
Oregon:														
14	Nonmetallic minerals mining:													
	Establishments.....number..	172	166	29	-	25	4	132	-	106	26	3	6	
	Employees.....do.....	1,756	1,754	74	-	(D)	(D)	1,664	-	1,141	523	18	2	
	Value added in mining...\$1,000..	(D)	(D)	(D)	-	(D)	(D)	15,088	-	11,812	3,276	167	(D)	
142	Crushed and broken stone:													
	Establishments.....number..	66	63	13	-	13	-	48	-	48	-	2	3	
	Employees.....do.....	558	554	(D)	-	(D)	-	516	-	516	-	(D)	2	
	Value added in mining...\$1,000..	5,130	5,111	(D)	-	(D)	-	4,998	-	4,998	-	(D)	2	
144	Sand and gravel:													
	Establishments.....number..	86	86	11	-	7	4	73	-	47	26	-	-	
	Employees.....do.....	1,121	1,144	(D)	-	25	(D)	(D)	-	(D)	523	-	-	
	Value added in mining...\$1,000..	10,201	10,201	(D)	-	251	(D)	(D)	-	(D)	3,276	-	-	
California:														
14	Nonmetallic minerals mining:													
	Establishments.....number..	711	683	177	16	149	12	503	4	437	67	2	25	
	Employees.....do.....	10,698	10,621	(D)	(D)	417	60	9,911	119	7,767	2,025	(D)	77	
	Value added in mining...\$1,000..	199,164	199,193	(D)	(D)	4,953	776	191,798	720	152,426	38,652	(D)	(D)	
142	Crushed and broken stone:													
	Establishments.....number..	156	151	18	-	18	-	130	1	129	-	2	4	
	Employees.....do.....	1,516	1,503	142	-	142	-	1,349	(D)	(D)	-	(D)	5	
	Value added in mining...\$1,000..	24,558	24,515	2,161	-	2,161	-	22,145	(D)	(D)	-	(D)	(D)	
144	Sand and gravel:													
	Establishments.....number..	374	365	52	-	47	8	310	-	244	64	-	9	
	Employees.....do.....	4,766	4,722	127	-	93	29	4,600	-	3,871	729	-	39	
	Value added in mining...\$1,000..	86,110	86,125	2,241	-	1,742	499	83,884	-	73,026	10,858	-	(D)	
145	Clay and related minerals:													
	Establishments.....number..	32	31	20	1	18	1	11	1	10	-	-	-	
	Employees.....do.....	311	311	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-	
	Value added in mining...\$1,000..	4,368	4,365	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-	
149	Misc. nonmetallic minerals:													
	Establishments.....number..	87	83	36	14	21	1	47	-	47	-	-	4	
	Employees.....do.....	1,227	1,201	109	57	(D)	(D)	1,092	-	1,092	-	-	2	
	Value added in mining...\$1,000..	24,873	24,850	1,742	1,086	(D)	(D)	23,108	-	23,108	-	-	23	
Hawaii:														
14	Nonmetallic minerals mining:													
	Establishments.....number..	44	44	18	-	18	-	24	-	23	1	2	-	
	Employees.....do.....	315	315	(D)	-	(D)	-	254	-	(D)	(D)	(D)	-	
	Value added in mining...\$1,000..	4,909	4,909	(D)	-	(D)	-	4,013	-	(D)	(D)	(D)	-	

See footnotes at end of table.

TABLE 2C. Selected Statistics for Industry Groups, Except Service Industries, by Type of Operation and Geographic Area: 1963—Continued

Ind. code	Industry group, geographic area and item	All types of establishments, total	Producing establishments									Nonproducing establishments	
			Total	Mining only				Mines with preparation plants					Separately operated preparation plants
				Total	Underground mines	Open-pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open-pit mines	Combination methods and other methods		
142	Pacific--Continued Hawaii--Continued Crushed and broken stone: Establishments.....number.. Employees.....do..... Value added in mining...\$1,000..	24 285 4,094	24 285 4,094	3 (D) (D)	- - -	3 (D) (D)	- - -	19 236 3,414	- - -	19 236 3,414	- (D) (D)	- - -	

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Includes figures for separately reported central offices and related facilities which were not distributed by type of operation.

<sup>2</sup>Not shown since the cost of supplies, purchased fuels and electric energy, contract work, and purchased machinery installed exceeded the sum of shipments and receipts and capital expenditures.

<sup>3</sup>Includes figures for 1 metal mining establishment.

<sup>4</sup>Includes figures for 1 nonmetallic minerals mining services establishment.

<sup>5</sup>Includes figures for 3 nonmetallic minerals mining services establishments.

<sup>6</sup>Includes figures for 2 nonmetallic minerals mining services establishments.

<sup>7</sup>Includes figures for 7 nonmetallic minerals mining services establishments.



TABLE 3. Detailed

	Item	All nonmetallic minerals mining operations			Dimension stone		
		Total	14-Nonmetallic minerals mining industries	Included in manufactures	All operations		
					Total	1411-Dimension stone industry	Included in manufactures
1	Number of operating companies.....	8,497	7,079	1,507	503	289	218
2	Number of establishments, total.....	10,302	8,421	1,881	551	319	232
3	With 0-19 employees.....	8,572	6,935	1,637	444	294	150
4	With 20-99 employees.....	1,562	1,353	209	81	24	57
5	With 100 employees and over.....	168	133	35	26	1	25
6	Including mines and quarries.....	10,087	8,206	1,881	551	319	232
7	Including preparation plants.....	6,781	6,349	232	244	12	232
8	Net shipments of primary products <sup>1</sup> .....1,000 short tons..	(X)	(X)	(X)	3,016	1,330	1,686
9	Value of shipments and receipts.....\$1,000..	2,756,420	2,346,903	409,517	106,178	19,735	86,443
10	Minerals transferred to other establishments for preparation <sup>2</sup> and resales.....do....	77,811	74,323	3,488	4,024	536	3,488
11	Net shipments and receipts.....do....	2,678,609	2,272,580	406,029	102,154	19,199	82,955
12	Primary products or services <sup>3</sup> .....do....	2,678,609	2,272,580	406,029	96,327	18,525	77,802
13	Other products and services.....do....				5,827	674	5,153
14	Value added in mining.....do....	2,066,014	1,744,774	321,240	70,908	14,842	56,066
15	Persons in industry, total.....number..	(NA)	125,569	(NA)	(NA)	2,338	(NA)
16	Production, development, and exploration workers, average for the year.....do....	118,623	98,355	<sup>3</sup> 20,268	9,640	1,970	7,670
17	All other employees.....do....	<sup>4</sup> 24,044	22,883	<sup>4</sup> 1,161	1,347	186	1,161
18	Proprietors and firm members.....do....	(NA)	4,331	(NA)	(NA)	182	(NA)
19	Performing manual labor.....do....	(NA)	3,548	(NA)	(NA)	166	(NA)
20	Man-hours worked by production, development, and exploration workers, total.....1,000..	253,624	212,786	40,838	19,462	3,820	15,642
21	At mines and quarries, total.....do....	(NA)	128,098	(NA)	10,198	3,599	6,599
22	Underground.....do....	(NA)	11,270	(NA)	946	63	883
23	Open-pit or open quarry and well operations.....do....	(NA)	92,360	(NA)	7,433	2,981	4,452
24	Surface.....do....	(NA)	24,468	(NA)	1,819	555	1,264
25	At preparation plants.....do....	(NA)	84,688	(NA)	9,264	221	9,043
26	Man-hours spent on development and exploration work (included above).....do....	(NA)	4,296	(NA)	(NA)	38	(NA)
27	Principal expenses designated below, total.....\$1,000..	1,528,297	1,338,943	189,354	82,940	13,089	69,851
28	Wages of production, development, and exploration workers.....do....	595,630	501,952	93,678	39,061	6,986	32,075
29	Salaries of all other employees.....do....	166,341	159,501	6,840	7,698	858	6,840
30	Minerals received for preparation.....do....	58,633	55,145	3,488	3,502	<sup>5</sup> 14	3,488
31	Supplies.....do....	<sup>6</sup> 470,615	388,273	<sup>6</sup> 82,342	27,961	3,519	24,442
32	Purchases for resale.....do....						
33	Purchased fuel.....do....	<sup>6</sup> 96,155	95,193	<sup>6</sup> 962	1,606	644	962
34	Purchased electric energy.....do....	<sup>6</sup> 62,835	61,234	<sup>6</sup> 1,601	2,039	438	1,601
35	Contract work.....do....	<sup>6</sup> 78,088	77,645	<sup>6</sup> 443	1,073	630	443
36	Purchased machinery installed.....do....	<sup>4</sup> 175,551	172,167	<sup>4</sup> 3,384	4,146	762	3,384
37	Capital expenditures, total.....do....	<sup>4</sup> 251,471	247,528	<sup>4</sup> 3,943	5,057	1,114	3,943
38	Development and exploration of mineral property.....do....	716,081	16,081	(NA)	733	33	(NA)
39	Preparation plant and other construction.....do....	<sup>4</sup> 51,770	51,300	<sup>4</sup> 470	765	295	470
40	New machinery and equipment.....do....	<sup>4</sup> 157,148	154,314	<sup>4</sup> 2,834	3,365	531	2,834
41	Used plant and equipment.....do....	<sup>4</sup> 26,472	25,833	<sup>4</sup> 639	894	255	639
42	Energy used.....million kwh equivalent..	<sup>4</sup> 56,634	56,259	<sup>4</sup> 385	651	276	375
43	Coal.....1,000 short tons..	(NA)	556	(NA)	(NA)	1	(NA)
44	Distillate fuel oil.....1,000 barrels..	(NA)	4,110	(NA)	(NA)	24	(NA)
45	Residual fuel oil.....do....	(NA)	2,577	(NA)	(NA)	18	(NA)
46	Gas.....million cu. ft..	(NA)	88,568	(NA)	(NA)	250	(NA)
47	Gasoline.....1,000 gallons..	(NA)	66,143	(NA)	(NA)	749	(NA)
48	Other fuels.....\$1,000..	(NA)	7,159	(NA)	(NA)	137	(NA)
49	Undistributed.....do....	<sup>4</sup> 17,746	16,784	<sup>4</sup> 962	1,086	124	962
50	Electric energy purchased.....million kwh..	<sup>4</sup> 4,849	4,752	<sup>4</sup> 97	124	27	97
51	Electric energy generated and used.....do....	(NA)	554	(NA)	(NA)	-	(NA)
52	Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	(NA)	11,343	(NA)	(NA)	79	(NA)
53	Per production worker.....hp..	(NA)	115	(NA)	(NA)	40	(NA)
54	Prime movers.....1,000 hp..	(NA)	7,947	(NA)	(NA)	56	(NA)
55	Electric motors driven by purchased energy.....do....	(NA)	3,396	(NA)	(NA)	23	(NA)
56	Horsepower rating of electric motors driven by energy generated at the establishment.....do....	(NA)	207	(NA)	(NA)	(Z)	(NA)

See footnotes at end of table.

## Statistics: 1963

Dimension stone—Continued								
Dimension limestone			Dimension granite			Dimension stone, n.e.c.		
Total	Dimension limestone subindustry	Included in manufactures	Total	Dimension granite subindustry	Included in manufactures	Total	Dimension stone, n.e.c., subindustry	Included in manufactures
107	59	49	116	49	70	280	181	101
110	61	49	137	66	71	304	192	112
88	56	32	95	56	39	261	182	79
15	5	10	35	9	26	31	10	21
7	-	7	7	1	6	12	-	12
110	61	49	137	66	71	304	192	112
52	3	49	72	1	71	120	8	112
1,138	369	769	913	504	409	965	457	508
21,721	3,513	18,208	40,885	9,428	31,457	43,572	6,794	36,778
614	245	369	1,809	233	1,576	1,601	58	1,543
21,107	3,268	17,839	39,076	9,195	29,881	41,971	6,736	35,235
19,729	3,266	16,463	37,882	8,779	29,103	38,716	6,475	32,241
1,378	2	1,376	1,194	416	778	3,255	261	2,994
15,237	2,947	12,290	26,203	6,513	19,690	29,468	5,382	24,086
(NA)	366	(NA)	(NA)	844	(NA)	(NA)	1,128	(NA)
1,853	286	1,567	3,009	773	2,236	4,778	911	3,867
306	40	266	461	51	410	580	95	485
(NA)	40	(NA)	(NA)	20	(NA)	(NA)	122	(NA)
(NA)	37	(NA)	(NA)	18	(NA)	(NA)	111	(NA)
3,772	568	3,204	6,099	1,645	4,454	9,591	1,607	7,984
1,879	508	1,371	3,451	1,585	1,866	4,868	1,506	3,362
1	1	-	7	7	-	938	55	883
1,744	484	1,260	2,681	1,404	1,277	3,008	1,093	1,915
134	23	111	763	174	589	922	358	564
1,893	60	1,833	2,648	60	2,588	4,723	101	4,622
(NA)	1	(NA)	(NA)	31	(NA)	(NA)	6	(NA)
17,037	1,976	15,061	30,882	6,628	24,254	35,021	4,485	30,536
8,679	1,108	7,571	12,738	3,271	9,467	17,644	2,607	15,037
1,589	158	1,431	3,199	330	2,869	2,910	370	2,540
383	514	369	1,576	-	1,576	1,543	-	1,543
5,276	390	4,886	11,553	2,297	9,256	11,132	832	10,300
354	77	277	656	328	328	596	239	357
457	68	389	742	221	521	840	149	691
299	161	138	418	181	237	356	288	68
897	138	759	1,066	273	793	2,183	351	1,832
1,182	282	900	1,329	385	944	2,546	447	2,099
74	4	(NA)	1423	23	(NA)	146	6	(NA)
88	15	73	299	123	176	378	157	221
810	142	668	790	186	604	1,765	203	1,562
280	121	159	217	53	164	397	81	316
112	23	89	337	185	152	202	68	134
(NA)	(Z)	(NA)	(NA)	(Z)	(NA)	(NA)	(Z)	(NA)
(NA)	3	(NA)	(NA)	11	(NA)	(NA)	10	(NA)
(NA)	1	(NA)	(NA)	17	(NA)	(NA)	(Z)	(NA)
(NA)	(Z)	(NA)	(NA)	250	(NA)	(NA)	-	(NA)
(NA)	63	(NA)	(NA)	528	(NA)	(NA)	158	(NA)
(NA)	24	(NA)	(NA)	53	(NA)	(NA)	60	(NA)
295	18	277	355	27	328	436	79	357
25	4	21	44	14	30	55	9	46
(NA)	-	(NA)	(NA)	-	(NA)	(NA)	-	(NA)
(NA)	18	(NA)	(NA)	28	(NA)	(NA)	33	(NA)
(NA)	63	(NA)	(NA)	36	(NA)	(NA)	36	(NA)
(NA)	13	(NA)	(NA)	18	(NA)	(NA)	25	(NA)
(NA)	5	(NA)	(NA)	10	(NA)	(NA)	8	(NA)
(NA)	(Z)	(NA)	(NA)	(Z)	(NA)	(NA)	-	(NA)

TABLE 3. Detailed

Item	Crushed and broken stone					
	All operations			Crushed and broken limestone		
	Total	1421-Crushed and broken stone industry	Included in manufactures	Total	Crushed and broken limestone subindustry	Included in manufactures
1 Number of operating companies.....	1 886	1,780	194	1,328	1,277	139
2 Number of establishments, total.....	2,586	2,256	330	1,882	1,612	270
3 With 0-19 employees.....	1,819	1,588	231	1,299	1,121	178
4 With 20-99 employees.....	716	624	92	552	464	88
5 With 100 employees and over.....	51	44	7	31	27	4
6 Including mines and quarries.....	2,540	2,210	330	1,857	1,587	270
7 Including preparation plants.....	2,097	2,097	-	1,529	1,529	-
8 Net shipments of primary products <sup>1</sup> .....1,000 short tons..	587,860	474,413	113,447	460,834	355,812	105,022
9 Value of shipments and receipts.....\$1,000..	949,791	794,860	154,931	681,938	542,886	139,052
10 Minerals transferred to other establishments for preparation <sup>2</sup> and resales.....do..	19,141	19,141	(X)	14,886	14,886	(X)
11 Net shipments and receipts.....do..	930,650	775,719	154,931	667,052	528,000	139,052
12 Primary products or services <sup>3</sup> .....do..	894,124	739,193	154,931	642,341	503,289	139,052
13 Other products and services.....do..	36,526	36,526	(NA)	24,711	24,711	(NA)
14 Value added in mining.....do..	705,553	581,655	123,898	520,606	408,450	112,156
15 Persons in industry, total.....number..	(NA)	44,265	(NA)	(NA)	31,853	(NA)
16 Production, development, and exploration workers, average for the year.....do..	42,070	36,186	<sup>3</sup> 5,884	31,299	26,331	<sup>3</sup> 4,968
17 All other employees.....do..	47,050	7,050	(NA)	44,764	4,764	(NA)
18 Proprietors and firm members.....do..	(NA)	1,029	(NA)	(NA)	758	(NA)
19 Performing manual labor.....do..	(NA)	693	(NA)	(NA)	499	(NA)
20 Man-hours worked by production, development, and exploration workers, total.....1,000..	92,602	80,834	11,768	69,301	59,365	9,936
21 At mines and quarries, total.....do..	(NA)	50,602	(NA)	(NA)	38,322	(NA)
22 Underground.....do..	(NA)	2,686	(NA)	(NA)	2,253	(NA)
23 Open-pit or open quarry and well operations.....do..	(NA)	38,420	(NA)	(NA)	29,270	(NA)
24 Surface.....do..	(NA)	9,496	(NA)	(NA)	6,799	(NA)
25 At preparation plants.....do..	(NA)	30,232	(NA)	(NA)	21,043	(NA)
26 Man-hours spent on development and exploration work (included above).....do..	(NA)	1,239	(NA)	(NA)	1,087	(NA)
27 Principal expenses designated below, total.....\$1,000..	527,447	465,000	62,447	368,055	313,915	54,140
28 Wages of production, development, and exploration workers.....do..	209,257	177,843	31,414	154,035	126,791	27,244
29 Salaries of all other employees.....do..	51,272	51,272	(NA)	33,797	33,797	(NA)
30 Minerals received for preparation.....do..	9,051	9,051	(X)	7,061	7,061	(X)
31 Supplies.....do..	257,867	157,345	31,033	173,162	96,967	26,896
32 Purchases for resale.....do..						
33 Purchased fuel.....do..						
34 Purchased electric energy.....do..						
35 Contract work.....do..						
36 Purchased machinery installed.....do..	(NA)	60,007	(NA)	(NA)	40,644	(NA)
37 Capital expenditures, total.....do..	(NA)	82,687	(NA)	(NA)	59,535	(NA)
38 Development and exploration of mineral property.....do..	(NA)	1,402	(NA)	(NA)	1,034	(NA)
39 Preparation plant and other construction.....do..	(NA)	18,741	(NA)	(NA)	11,829	(NA)
40 New machinery and equipment.....do..	(NA)	50,813	(NA)	(NA)	37,213	(NA)
41 Used plant and equipment.....do..	(NA)	11,731	(NA)	(NA)	9,459	(NA)
42 Energy used.....million kwh equivalent..	(NA)	9,951	(NA)	(NA)	6,484	(NA)
43 Coal.....1,000 short tons..	(NA)	141	(NA)	(NA)	26	(NA)
44 Distillate fuel oil.....1,000 barrels..	(NA)	1,677	(NA)	(NA)	1,284	(NA)
45 Residual fuel oil.....do..	(NA)	518	(NA)	(NA)	308	(NA)
46 Gas.....million cu. ft..	(NA)	3,402	(NA)	(NA)	1,514	(NA)
47 Gasoline.....1,000 gallons..	(NA)	30,817	(NA)	(NA)	24,587	(NA)
48 Other fuels.....\$1,000..	(NA)	1,821	(NA)	(NA)	1,238	(NA)
49 Undistributed.....do..	(NA)	4,703	(NA)	(NA)	3,922	(NA)
50 Electric energy purchased.....million kwh..	(NA)	1,298	(NA)	(NA)	910	(NA)
51 Electric energy generated and used.....do..	(NA)	49	(NA)	(NA)	36	(NA)
52 Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	(NA)	4,269	(NA)	(NA)	3,219	(NA)
53 Per production worker.....hp..	(NA)	118	(NA)	(NA)	122	(NA)
54 Prime movers.....1,000 hp..	(NA)	2,907	(NA)	(NA)	2,237	(NA)
55 Electric motors driven by purchased energy.....do..	(NA)	1,362	(NA)	(NA)	982	(NA)
56 Horsepower rating of electric motors driven by energy generated at the establishment.....do..	(NA)	42	(NA)	(NA)	38	(NA)

See footnotes at end of table.

## Statistics: 1963—Continued

Crushed and broken stone—Continued						Sand and Gravel						
Crushed and broken granite			Crushed and broken stone, n.e.c.			All operations			Mineral subindustries			
Total	Crushed and broken granite subindustry	Included in manufactures	Total	Crushed and broken stone, n.e.c., subindustry	Included in manufactures	Total	1441—Sand and gravel industry	Included in manufactures	Construction sand and gravel	Glass sand	Molding sand	Industrial sand, n.e.c.
99	95	4	459	408	54	4,729	4,141	618	4,001	32	68	59
154	150	4	550	494	56	5,241	4,616	625	4,419	39	93	65
89	85	4	431	382	49	4,707	4,104	603	3,957	16	82	49
60	60	-	104	100	4	512	492	20	446	21	11	14
5	5	-	15	12	3	22	20	2	16	2	-	2
154	150	4	529	473	56	5,209	4,584	625	4,394	38	91	61
140	140	-	428	428	-	3,840	3,840	-	3,658	39	85	58
48,897	48,672	225	76,521	68,449	8,072	614,706	557,513	57,193	534,887	5,510	5,396	3,724
90,213	89,749	464	177,640	162,225	15,415	757,722	678,068	79,654	607,539	29,099	16,642	24,788
187	187	(X)	4,068	4,068	(X)	11,502	11,502	(X)	10,454	346	327	375
90,026	89,562	464	173,572	158,157	15,415	746,220	666,566	79,654	597,085	28,753	16,315	24,413
85,604	85,140	464	164,618	149,203	15,415	725,858	646,204	79,654	574,978	21,048	13,751	14,967
4,422	4,422	(NA)	8,954	8,954	(NA)	20,362	20,362	(NA)	22,107	7,705	2,564	9,446
62,020	61,702	318	122,927	111,503	11,424	582,696	513,728	68,968	459,288	22,649	12,838	18,953
(NA)	4,103	(NA)	(NA)	8,309	(NA)	(NA)	42,667	(NA)	38,837	1,576	982	1,272
3,471	3,449	322	7,300	6,406	3,894	35,919	33,042	32,877	30,024	1,223	764	1,031
4611	611	(NA)	41,675	1,675	(NA)	47,100	7,100	(NA)	6,370	347	163	220
(NA)	43	(NA)	(NA)	228	(NA)	(NA)	2,525	(NA)	2,443	6	55	21
(NA)	41	(NA)	(NA)	153	(NA)	(NA)	2,220	(NA)	2,154	3	49	12
7,938	7,894	44	15,363	13,575	1,788	76,390	70,620	5,770	64,014	2,738	1,546	2,322
(NA)	5,137	(NA)	(NA)	7,143	(NA)	(NA)	43,735	(NA)	40,725	1,151	759	1,100
(NA)	121	(NA)	(NA)	312	(NA)	(NA)	209	(NA)	164	-	12	33
(NA)	3,589	(NA)	(NA)	5,561	(NA)	(NA)	36,433	(NA)	34,129	968	687	649
(NA)	1,427	(NA)	(NA)	1,270	(NA)	(NA)	7,093	(NA)	6,432	183	60	418
(NA)	2,757	(NA)	(NA)	6,432	(NA)	(NA)	26,885	(NA)	23,289	1,587	787	1,222
(NA)	43	(NA)	(NA)	109	(NA)	(NA)	1,050	(NA)	982	9	42	17
48,808	48,572	236	110,584	102,513	8,071	417,771	394,271	23,500	355,334	16,611	8,943	13,383
16,100	16,010	90	39,122	35,042	4,080	183,147	170,333	12,814	154,546	6,650	3,776	5,361
3,816	3,816	(NA)	13,659	13,659	(NA)	41,827	41,827	-	36,378	2,490	1,216	1,743
87	87	(X)	1,903	1,903	(X)	3,821	3,821	(X)	3,081	132	301	307
28,805	22,734	146	55,900	37,644	3,991	188,976	103,787	10,686	94,292	4,004	1,765	3,726
	1,867			5,256			5,832		5,478	219	22	113
	1,883			3,994			29,269		25,773	1,464	904	1,128
	2,175			5,015			17,046		14,552	1,330	465	729
							22,356		21,264	322	494	276
(NA)	6,486	(NA)	(NA)	12,877	(NA)	(NA)	57,953	(NA)	52,795	2,977	757	1,424
(NA)	7,185	(NA)	(NA)	15,967	(NA)	(NA)	75,724	(NA)	68,954	3,998	904	1,868
(NA)	146	(NA)	(NA)	222	(NA)	(NA)	1,191	(NA)	1,147	6	9	29
(NA)	1,782	(NA)	(NA)	5,130	(NA)	(NA)	14,237	(NA)	13,066	642	111	418
(NA)	4,425	(NA)	(NA)	9,175	(NA)	(NA)	49,859	(NA)	44,593	3,144	759	1,363
(NA)	832	(NA)	(NA)	1,440	(NA)	(NA)	10,437	(NA)	10,148	206	25	58
(NA)	812	(NA)	(NA)	2,655	(NA)	(NA)	10,176	(NA)	7,962	979	352	883
(NA)	6	(NA)	(NA)	109	(NA)	(NA)	157	(NA)	74	29	(Z)	54
(NA)	155	(NA)	(NA)	238	(NA)	(NA)	1,193	(NA)	1,003	62	62	66
(NA)	32	(NA)	(NA)	178	(NA)	(NA)	286	(NA)	203	23	32	28
(NA)	630	(NA)	(NA)	1,258	(NA)	(NA)	2,958	(NA)	496	1,419	343	700
(NA)	2,171	(NA)	(NA)	4,059	(NA)	(NA)	25,743	(NA)	24,337	644	276	486
(NA)	96	(NA)	(NA)	487	(NA)	(NA)	4,039	(NA)	3,902	27	93	17
(NA)	46	(NA)	(NA)	735	(NA)	(NA)	10,498	(NA)	10,127	164	112	95
(NA)	135	(NA)	(NA)	253	(NA)	(NA)	1,067	(NA)	889	104	26	48
(NA)	-	(NA)	(NA)	13	(NA)	(NA)	38	(NA)	17	-	-	21
(NA)	362	(NA)	(NA)	688	(NA)	(NA)	4,851	(NA)	4,603	101	81	66
(NA)	105	(NA)	(NA)	107	(NA)	(NA)	147	(NA)	153	83	106	64
(NA)	237	(NA)	(NA)	433	(NA)	(NA)	3,816	(NA)	3,658	51	59	48
(NA)	125	(NA)	(NA)	255	(NA)	(NA)	1,035	(NA)	945	50	22	18
(NA)	-	(NA)	(NA)	4	(NA)	(NA)	38	(NA)	29	-	-	9

TABLE 3. Detailed

Item	Clay and related minerals							
	All operations			1452-Bentonite industry	Fire Clay			1454-Fuller's earth industry
	Total	145-Clay and related minerals industries	Included in manufactures		Total	1453-Fire clay industry	Included in manufactures	
1 Number of operating companies.....	825	349	496	31	228	134	101	15
2 Number of establishments, total.....	1,080	423	657	44	293	155	138	15
3 With 0-19 employees.....	944	312	632	28	264	141	123	6
4 With 20-99 employees.....	124	99	25	16	29	14	15	7
5 With 100 employees and over.....	12	12	-	-	-	-	-	2
6 Including mines and quarries.....	1,080	423	657	44	293	155	138	15
7 Including preparation plants.....	201	201	-	32	38	38	-	12
8 Net shipments of primary products <sup>1</sup> .....1,000 short tons..	50,541	16,458	34,083	1,629	8,245	3,552	4,693	462
9 Value of shipments and receipts.....\$1,000..	221,417	161,644	59,773	18,105	40,540	17,105	23,435	12,954
10 Minerals transferred to other establishments for preparation <sup>2</sup> and resales.....do....	2,483	2,483	(X)	18,105	207	207	(X)	12,954
11 Net shipments and receipts.....do....	218,934	159,161	59,773	(D)	40,333	16,898	23,435	10,094
12 Primary products or services <sup>1</sup> .....do....	215,948	156,175	59,773	(D)	39,724	16,289	23,435	(D)
13 Other products and services.....do....	2,986	2,986	(NA)	(D)	609	609	(NA)	1
14 Value added in mining.....do....	160,006	113,585	46,421	11,435	30,596	12,640	17,956	9,071
15 Persons in industry, total.....number..	(NA)	8,524	(NA)	824	(NA)	1,100	(NA)	763
16 Production, development, and exploration workers, average for the year.....do....	10,263	7,147	3,116	644	2,057	861	3,196	653
17 All other employees.....do....	41,169	1,169	(NA)	167	4,118	118	(NA)	105
18 Proprietors and firm members.....do....	(NA)	208	(NA)	13	(NA)	121	(NA)	5
19 Performing manual labor.....do....	(NA)	155	(NA)	8	(NA)	89	(NA)	1
20 Man-hours worked by production, development, and exploration workers, total.....1,000..	21,277	15,061	6,216	1,508	4,041	1,640	2,401	1,363
21 At mines and quarries, total.....do....	(NA)	5,732	(NA)	494	(NA)	1,292	(NA)	206
22 Underground.....do....	(NA)	253	(NA)	49	(NA)	76	(NA)	-
23 Open-pit or open quarry and well operations.....do....	(NA)	4,593	(NA)	341	(NA)	1,088	(NA)	198
24 Surface.....do....	(NA)	886	(NA)	104	(NA)	128	(NA)	8
25 At preparation plants.....do....	(NA)	9,329	(NA)	1,014	(NA)	348	(NA)	1,157
26 Man-hours spent on development and exploration work (included above).....do....	(NA)	237	(NA)	13	(NA)	7	(NA)	13
27 Principal expenses designated below, total.....\$1,000..	120,862	93,768	27,094	11,019	20,339	9,228	11,111	7,318
28 Wages of production, development, and exploration workers.....do....	47,857	34,115	13,742	3,141	9,427	3,795	5,632	2,423
29 Salaries of all other employees.....do....	8,056	8,056	-	986	813	813	-	644
30 Minerals received for preparation.....do....	438	438	(X)	69	69	(X)	-	-
31 Supplies.....do....	27,731	27,731	4,349	4,349	2,622	2,622	5,479	2,525
32 Purchases for resale.....do....	1,882	1,882	681	681	109	109	-	-
33 Purchased fuel.....do....	64,511	11,470	13,352	514	10,030	637	5,479	1,035
34 Purchased electric energy.....do....	5,019	5,019	514	514	239	239	321	321
35 Contract work.....do....	5,075	5,075	1,348	1,348	944	944	370	370
36 Purchased machinery installed.....do....	(NA)	11,081	(NA)	1,134	(NA)	2,004	(NA)	805
37 Capital expenditures, total.....do....	(NA)	14,619	(NA)	1,356	(NA)	2,159	(NA)	1,173
38 Development and exploration of mineral property.....do....	(NA)	1,128	(NA)	112	(NA)	195	(NA)	-
39 Preparation plant and other construction.....do....	(NA)	3,299	(NA)	358	(NA)	574	(NA)	293
40 New machinery and equipment.....do....	(NA)	9,165	(NA)	727	(NA)	1,131	(NA)	776
41 Used plant and equipment.....do....	(NA)	1,027	(NA)	159	(NA)	259	(NA)	104
42 Energy used.....million kwh equivalent..	(NA)	8,278	(NA)	614	(NA)	176	(NA)	748
43 Coal.....1,000 short tons..	(NA)	82	(NA)	-	(NA)	-	(NA)	-
44 Distillate fuel oil.....1,000 barrels..	(NA)	532	(NA)	16	(NA)	10	(NA)	19
45 Residual fuel oil.....do....	(NA)	313	(NA)	74	(NA)	5	(NA)	29
46 Gas.....million cu. ft..	(NA)	17,112	(NA)	1,308	(NA)	30	(NA)	2,021
47 Gasoline.....1,000 gallons..	(NA)	3,436	(NA)	141	(NA)	258	(NA)	204
48 Other fuels.....\$1,000..	(NA)	650	(NA)	3	(NA)	274	(NA)	19
49 Undistributed.....do....	(NA)	703	(NA)	4	(NA)	208	(NA)	-
50 Electric energy purchased.....million kwh..	(NA)	444	(NA)	41	(NA)	15	(NA)	28
51 Electric energy generated and used.....do....	(NA)	(2)	(NA)	-	(NA)	-	(NA)	-
52 Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	(NA)	527	(NA)	42	(NA)	85	(NA)	35
53 Per production worker.....do....	(NA)	74	(NA)	65	(NA)	100	(NA)	54
54 Prime movers.....1,000 hp..	(NA)	328	(NA)	21	(NA)	74	(NA)	24
55 Electric motors driven by purchased energy.....do....	(NA)	199	(NA)	21	(NA)	11	(NA)	11
56 Horsepower rating of electric motors driven by energy generated at the establishment.....do....	(NA)	1	(NA)	-	(NA)	1	(NA)	-

See footnotes at end of table.

## Statistics: 1963—Continued

Clay and related minerals—Continued					147—Chemical and fertilizer minerals							
1455—Kaolin and ball clay industry	1456—Feldspar industry	Clay and related minerals, n.e.c.			Total	1472—Barite industry	1473—Fluorspar industry	1474—Potash, soda, borate minerals industry	1475—Phosphate rock industry	1476—Rock salt industry	1477—Sulfur industry	1479—Chemical and fertilizer mining, n.e.c., industry
		Total	1459—Clay and related minerals, n.e.c., industry	Included in manufactures								
39	24	495	115	410	177	45	28	19	43	20	11	19
48	31	649	130	519	235	54	30	23	66	25	17	20
20	21	605	96	509	129	41	23	7	27	10	7	14
20	10	42	32	10	57	11	5	5	23	7	1	5
8	-	2	2	-	49	2	2	11	16	8	9	1
48	31	649	130	519	217	54	24	23	56	23	17	20
37	17	65	65	-	138	27	16	19	43	20	3	10
3,582	578	35,909	6,519	29,390	(X)	832	8595	6,870	920,843	108,769	94,923	(X)
66,077	8,459	75,282	38,944	36,338	576,904	16,668	15,792	192,116	161,658	59,297	113,103	18,270
1,004	30	75,282	38,944	(X)	40,064	132	3,452	192,116	31,363	667	-	18,270
65,073	8,429	75,282	38,944	36,338	536,840	16,536	12,340	192,116	130,295	58,630	113,103	10,689
65,073	7,624	73,819	37,481	36,338	536,840	16,392	10,001	186,524	130,295	58,630	113,091	10,689
	805	(D)	(D)	(NA)		144	2,339	(D)	-		12	(D)
49,841	6,117	52,946	24,481	28,465	433,313	11,107	8,869	156,151	94,889	49,539	100,349	12,409
3,367	470	(NA)	2,000	(NA)	21,118	1,467	800	7,055	5,640	2,450	2,607	1,091
2,916	394	3,599	1,679	31,920	14,595	911	682	4,822	3,996	1,812	1,600	772
430	67	4282	282	(NA)	6,445	523	122	2,228	1,628	631	1,003	310
21	9	(NA)	39	(NA)	78	33	4	5	16	7	4	9
12	8	(NA)	37	(NA)	59	23	4	3	13	5	4	7
6,123	850	7,392	3,577	3,815	31,213	1,887	1,346	9,849	9,047	4,260	3,264	1,560
1,679	227	(NA)	1,834	(NA)	18,418	867	874	4,287	5,020	3,058	3,239	1,073
121	-	(NA)	7	(NA)	6,964	157	651	3,010	761	1,617	-	768
1,282	166	(NA)	1,518	(NA)	6,414	567	56	253	3,016	209	2,149	164
276	61	(NA)	309	(NA)	5,040	143	167	1,024	1,243	1,232	1,090	141
4,444	623	(NA)	1,743	(NA)	12,795	1,020	472	5,562	4,027	1,202	25	487
182	19	(NA)	3	(NA)	1,108	14	20	197	828	22	25	2
35,427	5,275	41,484	25,501	15,983	306,871	12,719	10,949	102,818	106,054	27,956	33,638	12,737
14,500	1,749	16,617	8,507	8,110	85,678	3,605	3,037	32,901	20,642	11,142	10,578	3,773
3,218	214	2,181	2,181	-	51,430	3,194	944	18,958	11,313	4,813	10,019	2,189
11,924	1,889	24	24	(X)	41,266	3,339	3,339	33,623	33,623	-	-	524
3,236	331	22,662	6,492	7,873	69,335	3,758	2,258	28,687	17,568	10,108	4,994	5,742
1,875	460	5,550	5,550	23,630	15,694	374	456	9,650	4,986	509	7,546	109
674	602	1,610	1,610	15,694	19,838	831	595	4,624	8,274	957	50	363
3,764	732	(NA)	2,642	(NA)	33,849	742	320	7,998	9,648	427	451	37
5,237	1,702	(NA)	2,992	(NA)	60,021	1,101	313	26,773	22,234	7,401	1,086	1,113
478	210	(NA)	133	(NA)	10,801	20	15	7,806	1,902	983	3	72
584	907	(NA)	983	(NA)	11,801	440	163	4,893	5,494	556	77	178
4,094	468	(NA)	1,969	(NA)	36,414	526	89	13,766	14,512	5,688	986	847
81	117	(NA)	307	(NA)	1,005	115	46	308	326	174	20	16
2,547	155	(NA)	4,038	(NA)	25,695	271	331	8,279	4,619	502	11,583	110
1	-	(NA)	81	(NA)	170	(Z)	24	-	146	-	-	(Z)
100	56	(NA)	331	(NA)	474	19	22	29	357	24	18	5
74	37	(NA)	131	(NA)	1,296	3	9	648	632	-	2	2
6,296	153	(NA)	7,420	(NA)	62,702	451	86	21,202	2,208	1,207	37,463	85
933	-	(NA)	1,747	(NA)	3,174	328	104	777	1,323	286	328	28
184	7	(NA)	170	(NA)	317	4	77	125	67	17	20	7
18	40	(NA)	466	(NA)	134	43	29	2	15	9	3	33
212	-	(NA)	108	(NA)	1,638	68	35	457	941	73	3	61
(2)	(2)	(NA)	(2)	(NA)	460	-	20	344	-	9	87	-
192	40	(NA)	133	(NA)	1,235	66	24	330	525	106	151	39
66	102	(NA)	79	(NA)	85	66	35	68	131	58	94	51
115	15	(NA)	79	(NA)	592	40	11	167	169	46	150	9
77	25	(NA)	54	(NA)	643	20	13	163	356	60	1	30
-	-	(NA)	-	(NA)	120	(2)	6	81	(2)	2	30	-

TABLE 3. Detailed

Item	1481-Nonmetallic minerals services industry	Miscellaneous nonmetallic minerals			
		All operations			
		Total	149-Miscellaneous nonmetallic minerals industries	Included in manufactures	
1 Number of operating companies.....	118	420	413	9	
2 Number of establishments, total.....	119	490	453	37	
3 With 0-19 employees.....	108	421	400	21	
4 With 20-99 employees.....	11	58	43	15	
5 With 100 employees and over.....	-	11	10	1	
6 Including mines and quarries.....	(X)	490	453	37	
7 Including preparation plants.....	(X)	261	261	-	
8 Net shipments of primary products <sup>1</sup> .....1,000 short tons..	(X)	(X)	(X)	<sup>8</sup> 6,930	
9 Value of shipments and receipts.....\$1,000..	13,246	131,162	102,446	28,716	
10 Minerals transferred to other establishments for preparation <sup>2</sup> and resales.....do....	2	595	595	(X)	
11 Net shipments and receipts.....do....	13,244	130,567	101,851	28,716	
12 Primary products or services <sup>3</sup> .....do....	12,751	129,359	100,643	28,716	
13 Other products and services.....do....	493	1,208	1,208	(NA)	
14 Value added in mining.....do....	9,326	104,212	78,325	25,887	
15 Persons in industry, total.....number..	960	(NA)	5,697	(NA)	
16 Production, development, and exploration workers, average for the year.....do....	806	5,330	4,609	<sup>3</sup> 721	
17 All other employees.....do....	65	868	868	(NA)	
18 Proprietors and firm members.....do....	89	(NA)	220	(NA)	
19 Performing manual labor.....do....	66	(NA)	189	(NA)	
20 Man-hours worked by production, development, and exploration workers, total.....1,000..	1,575	11,105	9,663	1,442	
21 At mines and quarries, total.....do....	<sup>12</sup> 1,575	(NA)	4,437	(NA)	
22 Underground.....do....	(12)	(NA)	1,095	(NA)	
23 Open-pit or open quarry and well operations.....do....	<sup>12</sup> 1,066	(NA)	2,453	(NA)	
24 Surface.....do....	<sup>12</sup> 509	(NA)	889	(NA)	
25 At preparation plants.....do....	(12)	(NA)	5,226	(NA)	
26 Man-hours spent on development and exploration work (included above).....do....	<sup>13</sup> 406	(NA)	218	(NA)	
27 Principal expenses designated below, total.....\$1,000..	8,871	63,535	57,073	6,462	
28 Wages of production, development, and exploration workers.....do....	4,209	26,421	22,788	3,633	
29 Salaries of all other employees.....do....	372	5,686	5,686	-	
30 Minerals received for preparation.....do....	-	555	555	-	
31 Supplies.....do....	2,666		15,960		
32 Purchases for resale.....do....	1		233		
33 Purchased fuel.....do....	602	30,873	3,495	2,829	
34 Purchased electric energy.....do....	70		3,160		
35 Contract work.....do....	951		5,196		
36 Purchased machinery installed.....do....	1,064	(NA)	7,451	(NA)	
37 Capital expenditures, total.....do....	1,434	(NA)	11,929	(NA)	
38 Development and exploration of mineral property.....do....	6	(NA)	1,520	(NA)	
39 Preparation plant and other construction.....do....	274	(NA)	2,653	(NA)	
40 New machinery and equipment.....do....	922	(NA)	6,610	(NA)	
41 Used plant and equipment.....do....	232	(NA)	1,146	(NA)	
42 Energy used.....million kwh equivalent..	219	(NA)	1,804	(NA)	
43 Coal.....1,000 short tons..	3	(NA)	2	(NA)	
44 Distillate fuel oil.....1,000 barrels..	21	(NA)	189	(NA)	
45 Residual fuel oil.....do....	1	(NA)	145	(NA)	
46 Gas.....million cu. ft..	280	(NA)	2,318	(NA)	
47 Gasoline.....1,000 gallons..	778	(NA)	1,446	(NA)	
48 Other fuels.....\$1,000..	35	(NA)	160	(NA)	
49 Undistributed.....do....	119	(NA)	503	(NA)	
50 Electric energy purchased.....million kwh..	6	(NA)	272	(NA)	
51 Electric energy generated and used.....do....	(2)	(NA)	7	(NA)	
52 Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	69	(NA)	312	(NA)	
53 Per production worker.....hp..	86	(NA)	68	(NA)	
54 Prime movers.....1,000 hp..	65	(NA)	182	(NA)	
55 Electric motors driven by purchased energy.....do....	4	(NA)	130	(NA)	
56 Horsepower rating of electric motors driven by energy generated at the same establishment.....do....	1	(NA)	5	(NA)	

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

(2) Less than one-half of the unit of measure specified.

<sup>1</sup>Represents the product indicated by the name of the industry or subindustry. For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, includes minerals produced and used in the same establishment in making manufactured products. The value of such products was estimated.

<sup>2</sup>Except for potash, soda, and borate minerals and phosphate rock, represents the cost of minerals received for preparation. Information on shipments for preparation was not obtained for these industries.

<sup>3</sup>For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, the number of production, development, and exploration workers was estimated from reported figures for man-hours.

<sup>4</sup>Excludes data for crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments.

<sup>5</sup>Represents stone received for crushing.

<sup>6</sup>For crushed and broken stone, sand and gravel, clay, and gypsum mining operations in manufacturing establishments, data for the cost of purchased fuels, purchased electric energy, and contract work are included with those for cost of supplies.

## Statistics: 1963—Continued

Miscellaneous nonmetallic minerals—Continued									
Gypsum			1493—Mica industry	1494—Native asphalt and bitumens industry	1495—Pumice and pumicite industry	1496—Talc, soapstone, pyrophyllite industry	1497—Natural abrasives, except sand industry	1498—Peat industry	1499—Nonmetallic minerals, n.e.c., industry
Total	1492—Gypsum industry	Included in manufactures							
40	33	9	31	11	83	43	23	108	81
74	37	37	34	13	85	65	23	109	87
52	31	21	28	9	84	56	18	105	69
21	6	15	6	3	1	6	4	4	13
1	—	1	—	1	—	3	1	—	5
74	37	37	34	13	85	65	23	109	87
25	25	—	18	10	51	32	14	43	68
<sup>8</sup> 10,176	<sup>8</sup> 3,246	<sup>8</sup> 6,930	103	(D)	<sup>11</sup> 2,308	<sup>8</sup> 873	<sup>11</sup> 84	<sup>11</sup> 566	(X)
38,876	10,160	28,716	5,560	8,509	5,358	17,534	5,002	7,360	42,963
—	—	(X)	5,560	8,509	20	262	1	—	52
38,876	10,160	28,716	5,560	8,509	5,338	17,272	5,001	7,360	42,911
38,345	9,629	28,716	4,993	(D)	(D)	16,595	5,001	7,360	42,911
531	531	(NA)	(D)	(D)	5,338	677	—	—	—
33,640	7,753	25,887	3,925	6,333	4,198	13,746	4,125	5,626	32,619
(NA)	477	(NA)	407	427	293	1,307	312	571	1,903
1,104	383	<sup>3</sup> 721	357	357	222	1,054	216	442	1,578
<sup>4</sup> 75	75	(NA)	41	65	25	222	78	62	300
(NA)	19	(NA)	9	5	46	31	18	67	25
(NA)	17	(NA)	9	2	37	30	12	60	22
2,249	807	1,442	733	728	428	2,229	466	948	3,324
(NA)	604	(NA)	241	533	266	1,203	135	519	936
(NA)	84	(NA)	—	242	6	635	27	4	97
(NA)	429	(NA)	209	135	239	307	77	409	648
(NA)	91	(NA)	32	156	21	261	31	106	191
(NA)	203	(NA)	492	195	162	1,026	331	429	2,388
(NA)	1	(NA)	17	46	5	35	—	8	106
11,690	5,228	6,462	3,573	4,871	2,391	11,095	2,879	3,644	23,392
5,546	1,913	3,633	1,299	1,723	981	5,390	1,048	1,473	8,961
493	493	—	283	518	75	1,237	535	305	2,240
—	1,851	(X)	14,306	—	—	262	—	—	14,201
5,651	—	—	1,069	1,082	796	2,973	900	1,002	6,287
—	—	—	(14)	3	16	—	—	—	(14)
—	297	2,829	212	178	197	269	157	423	1,762
—	224	—	228	342	63	662	151	91	1,399
—	450	—	176	1,025	263	302	88	350	2,542
(NA)	864	(NA)	504	627	507	468	79	738	3,664
(NA)	1,279	(NA)	860	1,081	682	1,148	498	870	5,511
(NA)	90	(NA)	96	391	80	205	12	9	637
(NA)	206	(NA)	95	199	171	220	258	48	1,456
(NA)	862	(NA)	448	480	356	630	203	603	3,028
(NA)	121	(NA)	221	11	75	93	25	210	390
(NA)	122	(NA)	113	75	63	151	70	83	1,127
(NA)	—	(NA)	2	—	—	—	—	—	—
(NA)	19	(NA)	20	22	2	32	24	1	69
(NA)	18	(NA)	(Z)	(Z)	(Z)	4	—	(Z)	123
(NA)	60	(NA)	129	—	58	41	49	8	1,973
(NA)	130	(NA)	58	181	120	171	39	170	577
(NA)	17	(NA)	11	10	69	4	—	18	47
(NA)	60	(NA)	6	—	74	41	—	273	55
(NA)	15	(NA)	17	28	3	59	11	2	137
(NA)	(Z)	(NA)	—	—	(Z)	(Z)	(Z)	(Z)	7
(NA)	32	(NA)	25	34	26	48	17	26	104
(NA)	84	(NA)	74	95	117	46	79	59	66
(NA)	19	(NA)	17	18	21	22	13	24	48
(NA)	13	(NA)	8	16	5	26	4	2	56
(NA)	(Z)	(NA)	(Z)	—	(Z)	—	(Z)	(Z)	5

<sup>7</sup>Excludes data for mining operations in manufacturing establishments.<sup>8</sup>Represents production of crude material. For talc, soapstone, and pyrophyllite, includes production in other industries amounting to less than 5 percent of the total shown.<sup>9</sup>Represents 1,000 long tons of 2,240 pounds.<sup>10</sup>Includes shipments by other industries, amounting to less than 10 percent of the total shown.<sup>11</sup>Represents production. For pumice and pumicite and peat, includes production in other industries amounting to less than 5 percent of the total shown.<sup>12</sup>Somewhat different detail was reported for service establishments. The figures shown for "Open-pit" represent those reported for stripping overburden and for mining minerals for the account of others. The figures shown for "Surface" represent exploration work, including geophysical and other exploratory surveying, and such other services as drilling.<sup>13</sup>Represents exploration work, including geophysical and other exploratory surveying and stripping overburden.<sup>14</sup>Minerals received for preparation are included with purchases for resale.



TABLE 4. Selected Statistics for Establishments Classified by Employment Size, by Geographic Area: 1963

Item and geographic area	All establish- ments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
MINERAL INDUSTRIES											
United States, total:											
Number of establishments.....	8,421	4,089	1,400	1,446	1,085	268	99	23	11	-	-
All employees:											
Number.....	<sup>1</sup> 121,238	6,505	9,356	19,946	32,196	18,434	14,810	17,533	(D)	-	-
Payroll.....\$1,000..	<sup>1</sup> 661,453	27,072	43,711	98,200	165,613	99,038	89,167	117,194	(D)	-	-
Production, development, and exploration workers:											
Number.....	98,355	5,881	7,997	17,056	27,408	15,655	12,014	12,344	(D)	-	-
Man-hours.....1,000..	212,786	12,054	16,854	36,354	60,640	34,678	26,095	26,111	(D)	-	-
Wages.....\$1,000..	501,952	25,059	37,297	82,367	135,001	79,255	68,071	74,902	(D)	-	-
Value added in mining.....do..	1,744,774	87,552	110,677	254,139	423,817	255,253	275,684	337,652	(D)	-	-
Value of shipments and receipts.....do..	2,346,903	132,978	146,726	330,616	580,242	375,814	364,452	416,075	(D)	-	-
Capital expenditures.....do..	247,528	24,458	19,210	41,722	62,301	36,721	31,920	31,196	(D)	-	-
Number of establishments by geographic area:											
New England, total.....	346	173	53	63	49	6	2	-	-	-	-
Maine.....	42	30	5	5	2	-	-	-	-	-	-
New Hampshire.....	32	19	5	5	3	-	-	-	-	-	-
Vermont.....	44	23	5	6	5	3	2	-	-	-	-
Massachusetts.....	128	49	27	28	22	2	-	-	-	-	-
Rhode Island.....	21	12	2	3	4	-	-	-	-	-	-
Connecticut.....	79	40	9	16	13	1	-	-	-	-	-
Middle Atlantic, total.....	842	344	145	179	121	34	17	2	-	-	-
New York.....	320	145	64	55	38	9	7	2	-	-	-
New Jersey.....	150	51	27	29	31	9	3	-	-	-	-
Pennsylvania.....	372	148	54	95	52	16	7	-	-	-	-
East North Central, total.....	1,893	993	347	312	181	37	18	4	1	-	-
Ohio.....	488	233	97	84	55	13	5	1	-	-	-
Indiana.....	303	143	50	66	42	2	-	-	-	-	-
Illinois.....	399	176	77	77	49	14	5	1	-	-	-
Michigan.....	368	246	61	30	19	5	5	1	1	-	-
Wisconsin.....	335	195	62	55	16	3	3	1	-	-	-
West North Central, total.....	1,404	792	243	222	126	18	3	-	-	-	-
Minnesota.....	257	163	48	27	17	1	1	-	-	-	-
Iowa.....	256	122	43	62	28	1	-	-	-	-	-
Missouri.....	345	146	72	73	41	11	2	-	-	-	-
North Dakota.....	42	29	6	3	4	-	-	-	-	-	-
South Dakota.....	91	68	7	5	8	3	-	-	-	-	-
Nebraska.....	190	124	35	21	9	1	-	-	-	-	-
Kansas.....	223	140	32	31	19	1	-	-	-	-	-
South Atlantic, total.....	902	298	133	169	189	77	26	8	2	-	-
Delaware.....	13	7	5	1	-	-	-	-	-	-	-
Maryland.....	96	32	15	21	19	6	3	-	-	-	-
District of Columbia.....	-	-	-	-	-	-	-	-	-	-	-
Virginia.....	157	28	16	44	55	12	1	1	-	-	-
West Virginia.....	61	20	13	10	11	6	-	1	-	-	-
North Carolina.....	163	64	24	30	35	10	-	-	-	-	-
South Carolina.....	66	22	6	13	12	10	3	-	-	-	-
Georgia.....	144	41	21	21	35	17	4	4	1	-	-
Florida.....	202	84	33	29	22	16	15	2	1	-	-
East South Central, total.....	539	159	74	142	134	27	1	1	1	-	-
Kentucky.....	174	48	19	48	50	9	-	-	-	-	-
Tennessee.....	197	57	27	52	49	10	-	1	1	-	-
Alabama.....	101	31	13	27	24	5	1	-	-	-	-
Mississippi.....	67	23	15	15	11	3	-	-	-	-	-
West South Central, total.....	664	284	106	114	118	21	17	3	1	-	-
Arkansas.....	104	48	17	15	18	2	3	1	-	-	-
Louisiana.....	102	30	12	25	25	3	5	2	-	-	-
Oklahoma.....	111	55	16	20	17	2	1	-	-	-	-
Texas.....	347	151	61	54	58	14	8	-	1	-	-

See footnotes at end of table.

TABLE 4. Selected Statistics for Establishments Classified by Employment Size, by Geographic Area: 1963—Continued

Item and geographic area	All establish- ments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
MINERAL INDUSTRIES—Continued											
Number of establishments by geographic area—Continued											
Mountain, total.....	705	407	118	96	55	15	7	4	3	-	-
Montana.....	71	43	13	11	1	1	1	1	-	-	-
Idaho.....	60	38	15	3	-	4	-	-	-	-	-
Wyoming.....	55	28	4	7	12	2	1	1	-	-	-
Colorado.....	167	100	29	27	8	3	-	-	-	-	-
New Mexico.....	96	50	15	13	11	1	1	2	3	-	-
Arizona.....	85	41	17	17	9	-	1	-	-	-	-
Utah.....	84	38	20	12	8	4	2	-	-	-	-
Nevada.....	87	69	5	6	6	-	1	-	-	-	-
Pacific, total.....	1,126	639	181	149	112	33	8	1	3	-	-
Washington.....	178	127	26	12	12	-	1	-	-	-	-
Oregon.....	174	93	36	24	15	4	2	-	-	-	-
California.....	717	382	111	105	82	28	5	1	3	-	-
Alaska.....	13	8	1	4	-	-	-	-	-	-	-
Hawaii.....	44	29	7	4	3	1	-	-	-	-	-
OPERATIONS INCLUDED IN MANUFACTURES											
Number of operations:											
United States, total.....	1,881	1,096	298	243	166	43	28	6	1	-	-
New England, total.....	100	54	15	11	13	1	4	1	1	-	-
Maine.....	19	12	1	-	4	1	1	-	-	-	-
New Hampshire.....	7	5	1	-	-	-	1	-	-	-	-
Vermont.....	17	6	2	5	2	-	1	-	1	-	-
Massachusetts.....	30	9	9	5	6	-	-	1	-	-	-
Rhode Island.....	2	2	-	-	-	-	-	-	-	-	-
Connecticut.....	25	20	2	1	1	-	1	-	-	-	-
Middle Atlantic, total.....	242	118	35	47	30	10	2	-	-	-	-
New York.....	72	28	17	17	8	2	-	-	-	-	-
New Jersey.....	25	14	3	6	-	1	1	-	-	-	-
Pennsylvania.....	145	76	15	24	22	7	1	-	-	-	-
East North Central, total.....	392	249	53	43	28	10	7	2	-	-	-
Ohio.....	163	112	17	16	10	5	2	1	-	-	-
Indiana.....	53	26	7	8	6	1	4	1	-	-	-
Illinois.....	74	43	17	8	2	3	1	-	-	-	-
Michigan.....	51	34	5	7	5	-	-	-	-	-	-
Wisconsin.....	51	34	7	4	5	1	-	-	-	-	-
West North Central, total.....	216	141	27	19	22	4	2	1	-	-	-
Minnesota.....	31	24	1	-	3	2	1	-	-	-	-
Iowa.....	48	33	5	3	7	-	-	-	-	-	-
Missouri.....	71	40	14	8	7	-	1	1	-	-	-
North Dakota.....	4	2	2	-	-	-	-	-	-	-	-
South Dakota.....	10	7	-	-	1	2	-	-	-	-	-
Nebraska.....	9	7	-	1	1	-	-	-	-	-	-
Kansas.....	43	28	5	7	3	-	-	-	-	-	-
South Atlantic, total.....	257	163	34	25	21	8	4	2	-	-	-
Delaware.....	4	3	1	-	-	-	-	-	-	-	-
Maryland.....	23	9	4	6	3	-	1	-	-	-	-
District of Columbia.....	1	1	-	-	-	-	-	-	-	-	-
Virginia.....	41	21	7	4	6	1	2	-	-	-	-
West Virginia.....	13	7	4	-	1	1	-	-	-	-	-
North Carolina.....	57	46	4	5	1	-	-	1	-	-	-
South Carolina.....	26	22	2	1	-	1	-	-	-	-	-
Georgia.....	52	24	7	7	7	5	1	1	-	-	-
Florida.....	40	30	5	2	3	-	-	-	-	-	-
East South Central, total.....	115	64	21	9	15	2	4	-	-	-	-
Kentucky.....	25	17	6	1	1	-	-	-	-	-	-
Tennessee.....	25	11	5	2	4	1	2	-	-	-	-
Alabama.....	45	21	10	3	8	1	2	-	-	-	-
Mississippi.....	20	15	-	3	2	-	-	-	-	-	-
West South Central, total.....	192	121	33	19	15	3	1	-	-	-	-
Arkansas.....	30	20	4	4	1	1	-	-	-	-	-
Louisiana.....	19	17	-	2	-	-	-	-	-	-	-
Oklahoma.....	28	16	8	3	1	-	-	-	-	-	-
Texas.....	115	68	21	10	13	2	1	-	-	-	-

See footnotes at end of table.

**TABLE 4. Selected Statistics for Establishments Classified by Employment Size,  
by Geographic Area: 1963—Continued**

Item and geographic area	All establish- ments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
OPERATIONS INCLUDED IN MANUFACTURES—Con.											
Number of operations—Continued											
Mountain, total.....	148	85	25	31	5	1	1	-	-	-	-
Montana.....	11	10	-	1	-	-	-	-	-	-	-
Idaho.....	10	4	3	3	-	-	-	-	-	-	-
Wyoming.....	9	7	1	1	-	-	-	-	-	-	-
Colorado.....	39	27	7	4	1	-	-	-	-	-	-
New Mexico.....	16	7	3	4	2	-	-	-	-	-	-
Arizona.....	30	16	4	8	-	1	1	-	-	-	-
Utah.....	21	12	2	6	1	-	-	-	-	-	-
Nevada.....	12	2	5	4	1	-	-	-	-	-	-
Pacific, total.....	219	101	55	39	17	4	3	-	-	-	-
Washington.....	46	29	8	7	2	-	-	-	-	-	-
Oregon.....	25	16	6	3	-	-	-	-	-	-	-
California.....	140	52	39	27	15	4	3	-	-	-	-
Alaska.....	3	1	1	1	-	-	-	-	-	-	-
Hawaii.....	5	3	1	1	-	-	-	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
 \*Includes figures for some separately reported central offices and related facilities. These were not distributed by employment size.

## STONE

This report shows 1963 Census of Mineral Industries statistics for establishments classified in Industry Group 141, Dimension Stone, and Industry Group 142, Crushed and Broken Stone, Including Riprap. The separate industries and subindustries for which statistics are published in this report are as follows:

### SIC Code and Title

#### 1411—Dimension Stone

Dimension Limestone

Dimension Granite

Dimension Stone, Not Elsewhere Classified

#### 1421—Crushed and Broken Stone, Including Riprap

Crushed and Broken Limestone

Crushed and Broken Granite

Crushed and Broken Stone, Not Elsewhere Classified

### INDUSTRY DESCRIPTIONS

Industry 1411—Dimension Stone. This industry represents establishments primarily engaged in mining or quarrying dimension stone. Also included are establishments primarily engaged in producing rough blocks and slabs. Establishments primarily engaged in mining or quarrying and shaping grindstones, pulpstones, millstones, burrstones, and sharpening stones are classified in industry 1497; and those mining or quarrying dimension soapstone in industry 1496. Establishments primarily engaged in dressing (shaping, polishing, or otherwise finishing) rough blocks and slabs are classified in industry 3281, Cut Stone and Stone Products. Nepheline syenite operations are classified in industry 1459.

Dimension Limestone Subindustry. This subindustry represents establishments primarily engaged in mining or quarrying dimension limestone, including related rocks such as dolomite, travertine, and calcareous tufa.

Dimension Granite Subindustry. This subindustry represents establishments primarily engaged in mining or quarrying dimension granite, including related rocks such as gneiss, syenite, and diorite.

Dimension Stone, N.E.C., Subindustry. This subindustry represents establishments primarily engaged in mining or quarrying dimension stone, not elsewhere classified, such as slate, marble, trap rock (basalt, diabase, gabbro, and related rocks), sandstone and bluestone, mica schist, light-colored volcanic rocks, argillite, and greenstone.

Establishments classified in industry 1411, Dimension Stone, as interpreted in the 1963, 1958, and 1954 minerals censuses, represent only quarries without dressing plants operated as part of the same establishment. This report, however, includes also related 1963, 1958, and 1954 Census of Manufactures figures for dimension stone quarries operated in conjunction with dressing plants. These quarrying and dressing establishments represent part of manufacturing industry 3281, Cut Stone and Stone Products. Thus, the dimension stone total figures in this report represent all dimension stone quarries and all

dressing plants operated in conjunction with these quarries. Such figures for 1963, 1958, and 1954 are comparable with most of the statistics for years prior to 1954. Separate figures are shown for the two types of quarries throughout this report, quarries classified in the mineral industries being referred to as "quarries only," whereas quarries and their associated dressing plants classified in manufacturing are referred to as "quarries with dressing plants."

Industry 1421—Crushed and Broken Stone, Including Riprap. This industry represents establishments primarily engaged in mining or quarrying crushed and broken stone. Quarries operated in conjunction with cement and lime plants are included in this industry when separate reports are available, but the stone crushing operations performed at the plant are not included. Nepheline syenite operations are classified in industry 1459. Establishments primarily engaged in mining or preparing bituminous limestone and sandstone are classified in industry 1494, Native Asphalt and Bitumens.

Crushed and Broken Limestone Subindustry. This subindustry represents establishments primarily engaged in mining or quarrying crushed and broken limestone, including related rocks, such as dolomite, cement rock, marl, travertine, and calcareous tufa.

Crushed and Broken Granite Subindustry. This subindustry represents establishments primarily engaged in mining or quarrying crushed and broken granite, including related rocks, such as gneiss, syenite, and diorite.

Crushed and Broken Stone, N.E.C., Subindustry. This subindustry represents establishments primarily engaged in mining or quarrying crushed and broken stone, n.e.c., such as slate (including slate granules), marble, trap rock (basalt, diabase, gabbro, and related rocks), sandstone (including quartzite and ganister), and various light-colored volcanic rocks, mica schist, and mixed boulders.

Establishments classified in industry 1421, Crushed and Broken Stone, represent all separately operated quarries and crushing plants primarily producing crushed and broken stone. They do not include limestone, cement rock, and other stone quarries which are parts of establishments primarily manufacturing hydraulic cement, quicklime, hydrated lime, ready-mixed concrete, or bituminous concrete. Such establishments are classified in the manufacturing industries, principally in industry 3241, Cement, Hydraulic, and industry 3274, Lime. However, selected departmental data were obtained for such quarry operations and statistics for them from the 1963, 1958, and 1954 Censuses of Manufactures are presented throughout this report under the designation, "crushed stone quarries in manufactures."

Census figures for the Crushed and Broken Stone Industry exclude for 1963, as for previous years, data on production by Federal, State, and local governments. According to the Bureau of Mines, "noncommercial operations," principally of this type, produced about 10 percent of all crushed and broken stone in 1963.

## SUMMARY OF FINDINGS

The total value of shipments and receipts of dimension stone quarries in 1963 was \$106 million, of which rough and dressed dimension stone amounted to about \$94 million, and other products, purchases for resale without further processing, and receipts for services to about \$12 million. The value of shipments and receipts of quarries operated without dressing plants, the Dimension Stone Industry, was \$19.7 million, of which \$18.5 million represented rough dimension stone, the primary product of such establishments. Quarries with dressing plants, those classified in manufacturing, had products valued at \$86.4 million, shipping rough dimension stone valued at \$5.8 million and dressed dimension stone valued at \$69.5.

Shipments and receipts were distributed among the dimension stone subindustries as follows: Dimension limestone quarries with shipments amounting to \$21.7 million, of which \$3.5 million represented shipments by quarries without dressing plants (the dimension limestone subindustry); Dimension granite quarries with shipments amounting to \$40.9 million, of which \$9.4 million was by quarries without dressing plants (the dimension granite subindustry); and Dimension stone, n.e.c., quarries with shipments amounting to \$43.6 million, of which \$6.8 million was by quarries without dressing plants (the dimension stone, n.e.c., subindustry).

The total value of shipments of the Crushed and Broken Stone Industry in 1963 was \$795 million, of which crushed and broken stone, the primary product of this industry, amounted to \$748 million, and secondary products, products purchased and resold without further processing, and receipts for services amounted to \$47 million. In addition, for crushed stone quarries in manufactures, the value of stone shipped or quarried and used in the same establishment was \$155 million.

Shipments and receipts were distributed among the crushed and broken stone subindustries as follows: Crushed and broken limestone subindustry with shipments amounting to \$543 million and an additional \$139 million for stone shipped or used from limestone quarries in manufactures; Crushed and broken granite subindustry with shipments amounting to \$89.6 million and an additional \$0.5 million for granite shipped or used from granite quarries in manufacture; and Crushed and broken stone, n.e.c., subindustry with shipments amounting to \$162 million and an additional \$15 million for such stone shipped or used from stone, n.e.c., quarries in manufactures.

The figures given above represent the gross value of shipments and receipts and contain some duplication due to inclusion of the value of stone transferred from one establishment to another in the same industry or subindustry for dressing or crushing. The value of stone so transferred at dimension stone quarries was about \$3.5 million, and the value of crushed and broken stone so transferred was about \$9.1 million. Net shipments figures for quantity and value of stone which exclude this duplication are given in tables 1, 2, 3, and 6 of this report.

For the Dimension Stone Industry, the production index for primary products of the industry increased to 114 in 1963 from the 1958 level of 88. The unit value index for 1963 was 79 compared to 89 for 1958. Both indexes were computed on a basis of 1954 = 100. For the Crushed and Broken Stone Industry, the 1963 production index was 163 compared with 131 for 1958. The comparable unit value index for 1963 was 102 compared with 100 for 1958.

The general statistics (employment, payroll, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the production of secondary products, and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7 to 12) with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5 which shows the value of primary and secondary products shipped by establishments classified in the specified industry and also the value of net shipments of primary products of the industry produced as secondary products by establishments classified in other industries.

#### COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the Dimension Stone Industry are, in general, comparable with product statistics for such stone published by the Bureau

of Mines. The Census Bureau statistics for crushed and broken stone are less comparable to Mines statistics primarily because of the exclusion by the Bureau of the Census of the statistics on crushed and broken stone production by Federal, State, and local governments. The most nearly comparable statistics for stone from the two bureaus are shown in the table below. For crushed and broken stone, as indicated in this table, the Bureau of Mines shows separate figures for "commercial operations" and "government and contractor operations." Census figures include all of the first of these groups of establishments and some establishments in the second group, insofar as the latter represents contractors or subcontractors on Federal, State, or local government projects which were able to provide separate complete reports for their stone quarries.

Other reasons for differences in the product statistics are as follows:

- (1) The Bureau of the Census collects information on shipments (and some data on stone produced and used in the same establishment) and calculates net shipments, whereas the Bureau of Mines obtains figures on stone sold or used.

- (2) The Bureau of the Census excludes small establishments whose value of products and reported costs were below \$500. The Bureau of Mines includes all reports obtained regardless of size. However, the contribution to products of such establishments which Census excludes is usually small.

- (3) Differences exist in coverage in certain areas for both collecting agencies.

- (4) In some cases, a respondent reports his output of stone as one type of stone to the Bureau of the Census and as another to the Bureau of Mines.

- (5) For dimension stone, the Bureau of the Census figures represent shipments of rough dimension stone from separately operated quarries as well as shipments of rough dimension stone and dressed dimension stone from quarries with associated dressing plants located at the quarry site. No figures are included in the Census tabulations in this report for shipments of dressed dimension stone from dressing plants not operated in conjunction with a quarry, even though such a dressing plant may be an integral part of a company engaged in quarrying and dressing stone. Bureau of Mines production data are compiled on the basis of quantities and values of sales of both rough blocks and finished products by primary producers. These Bureau of Mines figures are compiled on a company basis. For example, in the case of a stone company having three establishments, (a) a quarry with no dressing plant; (b) a quarry with a dressing plant; and (c) a separately operated dressing plant, the Census figures would include only the first two types of establishments, whereas the Bureau of Mines would compile its figures on output of stone for this company on the basis of the figures reported by all three types of establishments. Thus, the Bureau of Mines would show less rough dimension stone shipped for this company and more dressed dimension stone shipped than would be shown by the Bureau of the Census. There is a considerable tonnage loss in fabricating dressed stone from rough blocks. Accordingly, it would be expected that the aggregate Bureau of Mines tonnage would be less than that of the Bureau of the Census even though the operations of the same companies were covered by both agencies.

## 1963 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Bureau of the Census statistics			Bureau of Mines statistics	
	Produc- tion <sup>1</sup>	Shipments includ- ing interplant transfers		Stone sold or used by producers	
		Quantity (1,000 short tons)	Value ((\$1,000))	Quantity (1,000 short tons)	Value ((\$1,000))
Dimension stone, total.....	(NA)	3,484	91,649	2,616	96,318
Rough (net).....	(NA)	2,227	22,142	<sup>2</sup> 1,377	<sup>2</sup> 20,159
Dressed.....	(NA)	1,257	69,507	<sup>2</sup> 1,239	<sup>2</sup> 76,159
Limestone, total.....	(NA)	1,531	19,890	895	18,134
Rough (net).....	(NA)	1,075	5,906	530	4,484
Dressed.....	(NA)	456	13,984	365	13,650
Granite, total.....	(NA)	923	35,636	753	32,796
Rough (net).....	(NA)	489	8,239	461	10,858
Dressed.....	(NA)	434	27,397	292	21,938
Stone, n.e.c., total.....	(NA)	1,030	36,123	968	45,388
Rough (net).....	(NA)	663	7,997	<sup>2</sup> 386	<sup>2</sup> 4,817
Dressed.....	(NA)	367	28,126	<sup>2</sup> 582	<sup>2</sup> 40,571
Crushed and broken stone, total.....	(NA)	(NA)	(NA)	685,750	971,790
Excluding Federal, State, and local government operations.....	603,693	504,363	791,009	(NA)	(NA)
Commercial.....	(NA)	(NA)	(NA)	618,424	892,479
Government and contractor.....	(NA)	(NA)	(NA)	67,326	79,311
Limestone <sup>3</sup> .....	471,375	376,256	536,996	488,348	661,926
Granite <sup>3</sup> .....	49,629	49,213	86,103	48,040	70,837
Stone, n.e.c. <sup>3</sup> .....	82,689	78,894	167,910	149,362	239,027

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Represents stone shipments plus stone mined and used in the same establishment in making cement, lime, and other manufactured products.

<sup>2</sup>Figures for rough monumental marble are included with those for dressed monumental marble.

<sup>3</sup>Census figures exclude operations by Federal, State, and local governments. Bureau of Mines figures represent totals for all stone sold or used by commercial, government, and contractor operations.





# STONE

## Distribution of Employment by State: 1963



## Employment and Production: 1840-1963

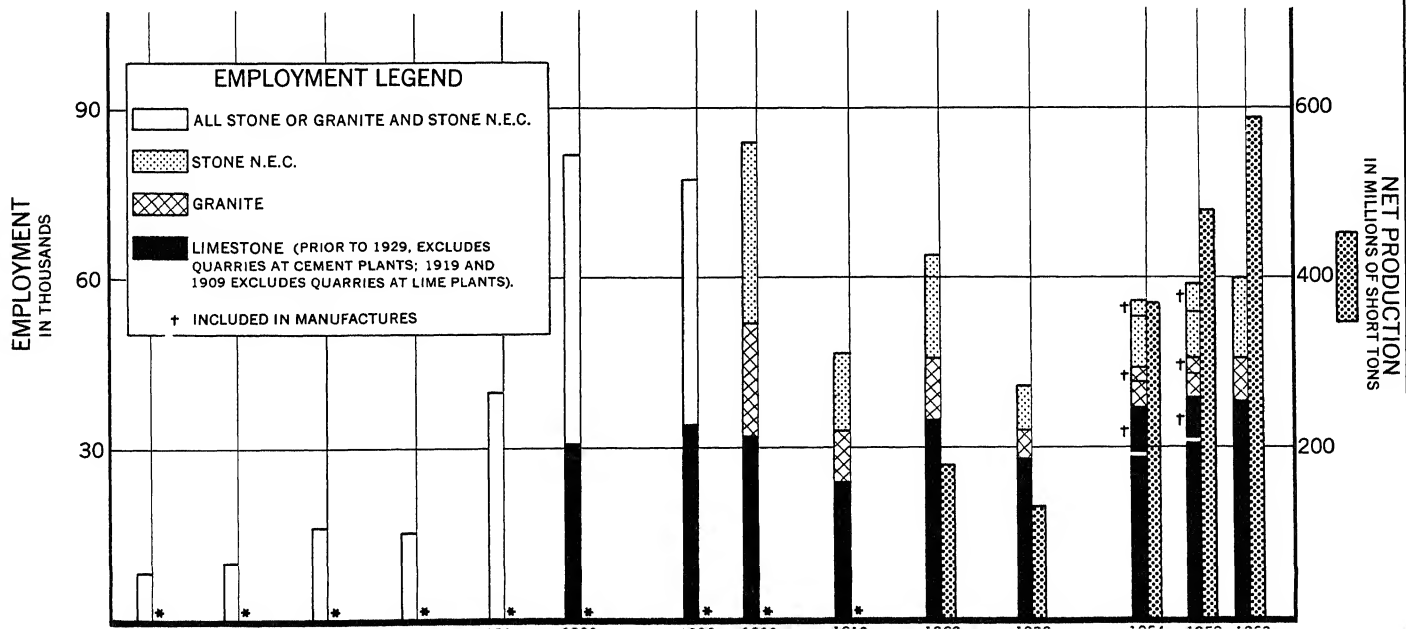


TABLE 1. General Statistics: 1963 and Earlier Years

Industry, industry code, and year	Operating companies  (number)	Establishments		All employees		Production, development, and exploration workers		
		Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)
ALL STONE QUARRIES, TOTAL.....1963.....	<sup>1</sup> 2,389	3,137	874	60,107	307,288	51,710	112,064	248,318
1958 <sup>2</sup> .....	<sup>1</sup> 2,196	2,745	867	58,961	257,853	50,954	106,853	208,317
1954 <sup>2</sup> .....	<sup>1</sup> 2,163	2,729	773	56,252	209,710	51,008	111,731	182,027
1939 <sup>3</sup> .....	1,526	<sup>4</sup> 1,934	(NA)	<sup>5</sup> 40,522	<sup>5</sup> 44,654	<sup>5</sup> 37,358	<sup>5</sup> 74,810	<sup>5</sup> 37,660
1929 <sup>6</sup> .....	(NA)	2,319	(NA)	63,808	85,999	58,268	(NA)	71,212
Excluding crushed and broken stone quarries in manufacturing establishments.....1929 <sup>6</sup> .....	(NA)	2,081	(NA)	(NA)	(NA)	48,235	(NA)	58,582
1919 <sup>6</sup> .....	(NA)	1,844	(NA)	46,988	52,900	43,152	(NA)	45,699
1909 <sup>7</sup> .....	4,039	4,039	(NA)	<sup>8</sup> 84,111	<sup>8</sup> 44,996	79,397	(NA)	39,817
1902 <sup>9</sup> .....	5,475	<sup>4</sup> 5,770	(NA)	76,472	42,025	<sup>10</sup> 71,185	(NA)	37,530
1889 <sup>9</sup> .....	888	<sup>4</sup> 4,163	(NA)	82,374	30,556	77,698	(NA)	(NA)
1880.....	(NA)	<sup>4</sup> 1,525	(NA)	39,723	(NA)	(NA)	(NA)	(NA)
1870.....	(NA)	1,120	(NA)	15,117	6,580	(NA)	(NA)	(NA)
1860 <sup>11</sup> .....	(NA)	1,828	(NA)	15,749	5,791	(NA)	(NA)	(NA)
1850 <sup>11</sup> .....	(NA)	1,149	(NA)	10,081	3,453	(NA)	(NA)	(NA)
1840.....	(NA)	(NA)	(NA)	7,859	(NA)	(NA)	(NA)	(NA)
All limestone quarries.....1963.....	<sup>1</sup> 1,435	1,992	605	38,222	198,100	33,152	73,073	162,714
1958.....	<sup>1</sup> 1,377	1,785	611	39,038	177,309	33,683	71,263	143,253
1954 <sup>12</sup> .....	<sup>1</sup> 1,426	1,796	543	37,254	141,049	33,782	74,055	123,066
1939 <sup>3</sup> .....	965	<sup>7</sup> 1,256	(NA)	<sup>5</sup> 27,748	<sup>5</sup> 30,806	<sup>5</sup> 25,619	<sup>5</sup> 51,101	<sup>5</sup> 26,167
1929 <sup>6</sup> .....	(NA)	1,167	(NA)	35,293	47,078	32,300	(NA)	39,188
Excluding crushed and broken limestone quarries in manufacturing establishments.....1929 <sup>6</sup> .....	(NA)	929	(NA)	(NA)	(NA)	22,267	(NA)	26,558
1919 <sup>6</sup> .....	(NA)	895	(NA)	24,072	27,653	22,069	(NA)	23,926
1909.....	1,677	<sup>4</sup> 1,677	(NA)	32,073	15,840	30,362	(NA)	14,115
1902 <sup>9</sup> .....	3,137	<sup>4</sup> 3,246	(NA)	33,778	16,595	<sup>10</sup> 31,547	(NA)	14,751
1889 <sup>9</sup> .....	(NA)	<sup>4</sup> 1,954	(NA)	30,644	10,122	28,741	(NA)	8,980
All granite quarries.....1963.....	<sup>1</sup> 215	291	107	7,552	35,853	6,480	14,037	28,838
1958.....	<sup>1</sup> 201	258	106	7,206	28,598	6,371	13,173	23,416
1954.....	214	247	82	6,583	22,686	6,030	13,100	19,485
1939 <sup>3</sup> .....	199	<sup>4</sup> 242	(NA)	<sup>5</sup> 4,801	<sup>5</sup> 5,093	<sup>5</sup> 4,417	<sup>5</sup> 8,841	<sup>5</sup> 4,156
1929 <sup>6</sup> .....	(NA)	406	(NA)	10,920	15,242	10,037	(NA)	12,640
1919.....	(NA)	358	(NA)	8,623	9,784	8,049	(NA)	8,588
1909.....	710	710	(NA)	19,669	12,185	18,748	(NA)	11,115
All stone quarries, n.e.c.....1963.....	<sup>1</sup> 739	854	162	14,333	73,335	12,078	24,954	56,766
1958.....	<sup>1</sup> 631	702	150	12,717	51,946	10,900	22,417	41,648
1954 <sup>12</sup> .....	<sup>1</sup> 566	678	146	12,246	45,380	11,042	24,257	38,962
1939 <sup>3</sup> .....	<sup>1</sup> 379	<sup>4</sup> 431	(NA)	<sup>5</sup> 7,896	<sup>5</sup> 8,676	<sup>5</sup> 7,251	<sup>5</sup> 14,722	<sup>5</sup> 7,268
1929 <sup>6</sup> .....	(NA)	746	(NA)	17,595	23,679	15,931	(NA)	19,384
1919 <sup>6</sup> .....	(NA)	591	(NA)	14,293	15,463	13,034	(NA)	13,185
1909 <sup>7</sup> .....	1,652	1,652	(NA)	32,042	16,340	30,287	(NA)	14,587
Dimension stone quarries, total.....1963.....	<sup>1</sup> 503	551	107	10,987	46,759	9,640	19,462	39,061
1958.....	504	557	119	12,250	44,911	10,825	20,679	36,768
1954.....	523	555	115	12,325	40,227	11,389	23,155	35,364
1929.....	(NA)	912	(NA)	(NA)	(NA)	22,651	(NA)	27,695
Quarries only (Industry 1411.—Dimension stone).....1963.....	<sup>1</sup> 289	319	25	2,156	7,844	1,970	3,820	6,986
1958.....	<sup>1</sup> 306	335	26	2,306	7,121	2,055	3,690	6,067
1954.....	322	351	46	3,224	8,625	3,068	5,893	7,938
1939 <sup>3</sup> .....	154	<sup>4</sup> 184	(NA)	2,890	3,007	2,725	(NA)	2,659
Quarries with dressing plants (included in manufactures).....1963.....	218	232	82	8,831	38,915	7,670	15,642	32,075
1958.....	208	222	93	9,944	37,790	8,770	16,989	30,701
1954.....	201	204	69	9,101	31,602	8,321	17,262	27,426
Dimension limestone quarries, total.....1963.....	107	110	22	2,159	10,268	1,853	3,772	8,679
1958.....	<sup>1</sup> 120	124	28	2,631	10,739	2,330	4,201	8,837
1954.....	103	106	29	2,850	10,359	2,693	5,391	9,479
1929.....	(NA)	287	(NA)	(NA)	(NA)	5,824	(NA)	7,121
Quarries only (dimension limestone subindustry).....1963.....	59	61	5	326	1,266	286	568	1,108
1958.....	65	68	8	583	2,120	491	879	1,592
1954.....	63	65	11	500	1,556	472	872	1,429
1939.....	33	<sup>4</sup> 40	(NA)	672	721	617	(NA)	632
Quarries with dressing plants (included in manufactures).....1963.....	49	49	17	1,833	9,002	1,567	3,204	7,571
1958.....	55	56	20	2,048	8,619	1,839	3,322	7,245
1954.....	40	41	18	2,350	8,803	2,221	4,519	8,050
Dimension granite quarries, total.....1963.....	116	137	42	3,470	15,937	3,009	6,099	12,738
1958.....	114	137	44	3,897	15,623	3,465	6,731	12,645
1954.....	136	143	42	4,009	13,701	3,662	7,445	11,806
1929.....	(NA)	320	(NA)	(NA)	(NA)	7,971	(NA)	10,478
Quarries only (dimension granite subindustry).....1963.....	49	66	10	824	3,601	773	1,645	3,271
1958.....	63	76	9	740	2,288	681	1,277	2,046
1954.....	79	86	15	967	2,639	917	1,769	2,404
1939 <sup>3</sup> .....	77	<sup>4</sup> 93	(NA)	1,238	1,479	1,163	(NA)	1,297

See footnotes at end of table.

TABLE 1. General Statistics: 1963 and Earlier Years—Continued

Industry, industry code, and year	Value added in mining (\$1,000)	Cost of supplies, minerals received for preparation, fuels, purchased electric energy, and contract work (\$1,000)	Cost of purchased machinery installed (\$1,000)	Value of shipments and receipts (\$1,000)	Value of net shipments and receipts <sup>13</sup> (\$1,000)	Quantity of primary products <sup>14</sup> (1,000 short tons)	Capital expenditures (\$1,000)	Horsepower rating of power equipment (1,000 hp)
ALL STONE QUARRIES, TOTAL.....1963.....	776,461	303,099	<sup>15</sup> 64,153	1,055,969	1,032,804	591,497	<sup>15</sup> 87,744	<sup>15</sup> 4,348
1958 <sup>2</sup> .....	663,197	234,056	<sup>15</sup> 54,673	848,875	829,089	<sup>24</sup> 79,163	<sup>15</sup> 73,051	(NA)
1954 <sup>2</sup> .....	498,339	167,575	<sup>15</sup> 47,635	665,491	656,135	367,743	48,058	<sup>15</sup> 3,059
1939 <sup>3</sup> .....	(NA)	<sup>5</sup> 1628,172	(NA)	(NA)	124,948	133,992	(NA)	<sup>51</sup> ,097
1929 <sup>6</sup> .....	155,497	<sup>16</sup> 45,143	8,495	(NA)	200,640	179,088	(NA)	841
Excluding crushed and broken stone quarries in manufacturing establishments.....1929 <sup>6</sup> .....	(NA)	<sup>16</sup> 36,299	(NA)	(NA)	169,608	121,444	(NA)	656
1919 <sup>6</sup> .....	75,055	27,002	(NA)	102,057	102,057	67,907	(NA)	380
1909 <sup>7</sup> .....	63,377	12,860	(NA)	76,237	76,237	(NA)	(NA)	306
1902 <sup>9</sup> .....	59,728	<sup>16</sup> 10,778	(NA)	(NA)	70,506	(NA)	(NA)	178
1889 <sup>9</sup> .....	45,113	<sup>16</sup> 7,923	(NA)	(NA)	53,036	(NA)	(NA)	76
1880.....	(NA)	<sup>17</sup> 192	(NA)	(NA)	18,356	(NA)	(NA)	(NA)
1870.....	10,950	<sup>16</sup> 1,136	(NA)	(NA)	12,086	(NA)	(NA)	4
1860 <sup>11</sup> .....	11,121	5,410	(NA)	16,531	(NA)	(NA)	(NA)	(NA)
1850 <sup>11</sup> .....	5,732	2,477	(NA)	8,209	(NA)	(NA)	(NA)	(NA)
1840.....	(NA)	(NA)	(NA)	3,696	(NA)	(NA)	(NA)	(NA)
All limestone quarries.....1963.....	535,843	186,992	<sup>15</sup> 41,541	703,659	688,159	462,377	<sup>15</sup> 60,717	<sup>15</sup> 3,237
1958.....	466,557	166,493	<sup>15</sup> 39,934	617,379	604,377	<sup>23</sup> 84,778	<sup>15</sup> 55,605	(NA)
1954 <sup>12</sup> .....	351,548	113,511	<sup>15</sup> 33,484	465,798	<sup>12</sup> 460,313	300,995	<sup>15</sup> 32,745	<sup>15</sup> 2,255
1939 <sup>3</sup> .....	(NA)	<sup>5</sup> 1619,550	(NA)	(NA)	82,211	109,726	<sup>5</sup> 790	<sup>5</sup> 790
1929 <sup>6</sup> .....	87,702	<sup>16</sup> 29,556	5,669	(NA)	117,258	144,252	(NA)	535
Excluding crushed and broken limestone quarries in manufacturing establishments.....1929 <sup>6</sup> .....	(NA)	<sup>16</sup> 20,712	(NA)	(NA)	86,226	86,608	(NA)	350
1919 <sup>6</sup> .....	37,134	15,810	(NA)	52,944	52,944	49,715	(NA)	214
1909.....	24,331	5,514	(NA)	29,845	29,845	(NA)	(NA)	126
1902 <sup>9</sup> .....	25,002	<sup>16</sup> 5,440	(NA)	(NA)	30,442	(NA)	(NA)	64
1889 <sup>9</sup> .....	14,868	<sup>16</sup> 4,227	(NA)	(NA)	19,095	(NA)	(NA)	22
All granite quarries.....1963.....	88,223	43,837	<sup>15</sup> 7,552	131,098	129,102	49,902	<sup>15</sup> 8,514	<sup>15</sup> 390
1958.....	57,808	25,197	6,420	84,004	80,821	34,494	5,421	(NA)
1954.....	43,359	16,554	<sup>15</sup> 3,867	59,728	(NA)	22,627	<sup>15</sup> 4,052	<sup>15</sup> 254
1939 <sup>3</sup> .....	(NA)	<sup>5</sup> 163,053	(NA)	(NA)	15,132	7,422	(NA)	<sup>5</sup> 105
1929 <sup>6</sup> .....	24,961	<sup>16</sup> 5,420	656	(NA)	30,381	8,364	(NA)	108
1919.....	14,472	3,807	(NA)	18,279	18,279	4,420	(NA)	56
1909.....	16,252	2,746	(NA)	18,998	18,998	(NA)	(NA)	61
All stone quarries, n.e.c.....1963.....	152,395	72,270	<sup>15</sup> 15,060	221,212	215,543	77,599	<sup>15</sup> 18,513	<sup>15</sup> 721
1958.....	108,832	43,366	<sup>15</sup> 8,319	147,492	143,891	<sup>25</sup> 8,930	<sup>15</sup> 12,025	(NA)
1954 <sup>12</sup> .....	102,320	37,152	<sup>15</sup> 10,058	138,462	(NA)	42,609	<sup>15</sup> 11,068	<sup>15</sup> 535
1939 <sup>3</sup> .....	(NA)	<sup>5</sup> 165,523	(NA)	(NA)	27,605	16,479	(NA)	<sup>5</sup> 202
1929 <sup>6</sup> .....	42,834	<sup>16</sup> 10,167	2,170	(NA)	53,001	26,472	(NA)	198
1919 <sup>6</sup> .....	23,449	7,385	(NA)	30,834	30,834	13,772	(NA)	110
1909 <sup>7</sup> .....	22,793	4,600	(NA)	27,393	(NA)	(NA)	(NA)	119
Dimension stone quarries, total.....1963.....	70,908	36,181	4,146	106,178	102,154	3,016	5,057	(NA)
1958.....	67,131	23,190	2,845	89,461	83,446	2,818	3,705	(NA)
1954.....	61,774	17,321	2,664	78,903	<sup>12</sup> 76,282	2,927	2,856	262
1929.....	55,496	9,839	(NA)	(NA)	65,335	<sup>18</sup> 17,149	(NA)	233
Quarries only (Industry 1411.—Dimension stone).....1963.....	14,842	5,245	762	19,735	19,199	1,330	1,114	79
1958.....	13,076	3,458	531	15,864	15,719	1,234	1,201	(NA)
1954.....	15,155	3,846	891	18,945	<sup>12</sup> 18,418	1,269	947	94
1939 <sup>3</sup> .....	5,283	1,073	(NA)	(NA)	6,356	(NA)	(NA)	59
Quarries with dressing plants (included in manufactures).....1963.....	56,066	30,936	3,384	86,443	82,955	1,686	3,943	(NA)
1958.....	54,055	19,732	2,314	73,597	67,727	1,584	2,504	(NA)
1954.....	46,619	13,475	1,773	59,958	<sup>12</sup> 57,864	1,426	1,909	168
Dimension limestone quarries, total.....1963.....	15,237	6,769	897	21,721	21,107	1,138	1,182	(NA)
1958.....	16,386	4,262	846	20,417	19,592	1,053	1,077	(NA)
1954.....	16,686	3,717	862	20,493	<sup>12</sup> 20,062	1,069	772	72
1929.....	16,290	3,028	(NA)	(NA)	19,318	<sup>18</sup> 10,973	(NA)	74
Quarries only (dimension limestone subindustry).....1963.....	2,947	710	138	3,513	3,268	369	282	18
1958.....	3,741	641	294	4,174	4,174	341	502	(NA)
1954.....	2,942	779	158	3,754	3,398	455	125	18
1939.....	1,368	173	(NA)	(NA)	1,541	(NA)	(NA)	17
Quarries with dressing plants (included in manufactures).....1963.....	12,290	6,059	759	18,208	17,839	769	900	(NA)
1958.....	12,645	3,621	552	16,243	15,418	712	575	(NA)
1954.....	13,744	2,938	704	16,739	<sup>12</sup> 16,664	614	647	54
Dimension granite quarries, total.....1963.....	26,203	14,945	1,066	40,885	39,076	913	1,329	(NA)
1958.....	24,315	10,229	582	34,408	31,430	816	718	(NA)
1954.....	20,976	7,561	826	28,498	27,733	669	865	85
1929.....	20,090	3,540	(NA)	(NA)	23,630	<sup>18</sup> 2,413	(NA)	70
Quarries only (dimension granite subindustry).....1963.....	6,513	3,027	273	9,428	9,195	504	385	28
1958.....	4,085	1,620	89	5,577	5,517	386	217	(NA)
1954.....	4,590	1,167	226	5,738	(D)	289	245	30
1939 <sup>3</sup> .....	2,674	594	(NA)	3,268	3,268	(NA)	(NA)	29

See footnotes at end of table.

TABLE 1. General Statistics: 1963 and Earlier Years—Continued

Industry, industry code, and year	Operating companies (number)	Establishments		All employees		Production, development, and exploration workers		
		Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)
ALL STONE QUARRIES--Continued								
Dimension stone quarries--Continued								
Dimension granite quarries--Continued								
Quarries with dressing plants (included in manufactures).....								
1963.....	70	71	32	2,646	12,336	2,236	4,454	9,467
1958.....	56	61	35	3,157	13,335	2,784	5,454	10,599
1954.....	57	57	27	3,042	11,062	2,745	5,676	9,402
Dimension stone quarries, n.e.c., total.....								
1963.....	280	304	43	5,358	20,554	4,778	9,591	17,644
1958.....	272	296	47	5,722	18,549	5,030	9,747	15,286
1954.....	284	306	44	5,466	16,167	5,034	10,319	14,079
1929.....	(NA)	305	(NA)	(NA)	(NA)	8,856	(NA)	10,096
Quarries only (dimension stone quarries, n.e.c., subindustry).....								
1963.....	181	192	10	1,006	2,977	911	1,607	2,607
1958.....	178	191	9	983	2,713	883	1,534	2,429
1954.....	180	200	20	1,757	4,430	1,679	3,252	4,105
1939.....	44	51	(NA)	980	807	945	(NA)	730
Quarries with dressing plants (included in manufactures).....								
1963.....	101	112	33	4,352	17,577	3,867	7,984	15,037
1958.....	99	105	38	4,739	15,836	4,147	8,213	12,857
1954.....	104	106	24	3,709	11,737	3,355	7,067	9,974
Crushed and broken stone quarries, total.....								
1963.....	<sup>1</sup> 1,886	2,586	767	49,120	260,529	42,070	92,602	209,257
1958 <sup>2</sup> .....	<sup>1</sup> 1,692	2,188	748	46,711	212,942	40,129	86,174	171,549
1954 <sup>2</sup> .....	<sup>1</sup> 1,691	2,174	658	43,927	169,483	39,619	88,576	146,663
1939 <sup>3</sup> .....	<sup>1</sup> 1,186	<sup>4</sup> 1,536	(NA)	33,707	37,655	30,937	62,366	31,492
1929.....	(NA)	1,437	(NA)	(NA)	(NA)	35,617	(NA)	43,517
Industry 1421.—Crushed and broken stone.....								
1963.....	<sup>1</sup> 1,780	2,256	668	43,236	229,115	36,186	80,834	177,843
1958 <sup>2</sup> .....	<sup>1</sup> 1,609	1,969	651	41,730	189,801	35,148	76,212	148,408
1954 <sup>2</sup> .....	<sup>1</sup> 1,530	1,919	531	37,640	146,067	33,332	75,999	123,247
1939 <sup>3</sup> .....	989	1,260	(NA)	26,575	29,213	24,110	(NA)	23,653
1929.....	(NA)	1,269	(NA)	(NA)	(NA)	25,584	(NA)	30,887
Quarries in manufacturing establishments.....								
1963.....	194	330	99	5,884	31,414	5,884	11,768	31,414
1958.....	111	219	97	<sup>1</sup> 94,981	<sup>1</sup> 923,141	<sup>1</sup> 94,981	9,962	23,141
1954.....	<sup>1</sup> 161	255	127	<sup>1</sup> 6,287	<sup>1</sup> 923,416	<sup>1</sup> 6,287	12,577	23,416
1939.....	197	<sup>4</sup> 276	(NA)	7,132	8,442	6,827	(NA)	7,839
1929.....	(NA)	238	(NA)	(NA)	(NA)	10,033	(NA)	12,630
Crushed and broken limestone quarries, total.....								
1963.....	1,328	1,882	583	36,063	187,832	31,299	69,301	154,035
1958.....	<sup>1</sup> 1,257	1,661	584	36,407	166,570	31,353	67,062	134,416
1954 <sup>2</sup> .....	<sup>1</sup> 1,323	1,690	514	34,404	130,690	31,089	68,664	113,587
1939 <sup>3</sup> .....	913	<sup>4</sup> 1,194	(NA)	26,513	29,356	24,482	48,901	24,903
1929.....	(NA)	980	(NA)	(NA)	(NA)	26,476	(NA)	32,067
Crushed and broken limestone subindustry.....								
1963.....	1,277	1,612	491	31,095	160,588	26,331	59,365	126,791
1958 <sup>2</sup> .....	1,181	1,463	487	31,507	143,705	26,453	57,262	111,551
1954 <sup>2</sup> .....	<sup>1</sup> 1,174	1,447	388	28,240	107,818	24,925	56,335	90,715
1939 <sup>3</sup> .....	716	<sup>4</sup> 918	(NA)	19,381	20,914	17,655	(NA)	17,064
1929.....	(NA)	742	(NA)	(NA)	(NA)	16,443	(NA)	19,437
Quarries in manufacturing establishments.....								
1963.....	139	270	92	<sup>1</sup> 94,968	<sup>1</sup> 927,244	<sup>1</sup> 94,968	9,936	27,244
1958.....	104	198	97	<sup>1</sup> 94,900	<sup>1</sup> 922,865	<sup>1</sup> 94,900	9,800	22,865
1954.....	149	243	126	<sup>1</sup> 6,164	<sup>1</sup> 922,872	<sup>1</sup> 6,164	12,329	22,872
1939.....	197	<sup>4</sup> 276	(NA)	7,132	8,442	6,827	(NA)	7,839
1929.....	(NA)	238	(NA)	(NA)	(NA)	10,033	(NA)	12,630
Crushed and broken granite quarries, total.....								
1963.....	99	154	65	4,082	19,916	3,471	7,938	16,100
1958 <sup>2</sup> .....	87	121	61	3,309	12,975	2,906	6,442	10,771
1954 <sup>2</sup> .....	78	104	40	2,574	8,985	2,368	5,655	7,679
1939 <sup>3</sup> .....	59	<sup>4</sup> 79	(NA)	2,332	2,355	2,100	4,574	1,782
1929.....	(NA)	86	(NA)	(NA)	(NA)	2,066	(NA)	2,162
Crushed and broken granite subindustry.....								
1963.....	95	150	65	4,060	19,826	3,449	7,894	16,010
Quarries in manufacturing establishments.....								
1963.....	4	4	-	<sup>1</sup> 922	<sup>1</sup> 990	<sup>1</sup> 922	44	90
Crushed and broken stone, n.e.c., quarries, total.....								
1963.....	459	550	119	8,975	52,781	7,300	15,363	39,122
1958 <sup>2</sup> .....	<sup>1</sup> 350	406	103	6,995	33,397	12,670	26,362	29,122
1954 <sup>2</sup> .....	<sup>1</sup> 282	372	102	6,780	29,213	6,008	13,938	24,883
1939 <sup>3</sup> .....	230	263	(NA)	4,862	5,944	4,355	8,891	4,807
1929.....	(NA)	371	(NA)	(NA)	(NA)	7,075	(NA)	9,288
Crushed and broken stone, n.e.c., subindustry.....								
1963.....	408	494	112	8,081	48,701	6,406	13,575	35,042
1958.....	<sup>1</sup> 341	385	105	6,914	33,121	5,789	12,508	26,086
1954 <sup>2</sup> .....	<sup>1</sup> 273	363	101	6,681	28,775	5,909	13,738	24,445
Quarries in manufacturing establishments.....								
1963.....	54	56	7	<sup>1</sup> 894	<sup>1</sup> 94,080	<sup>1</sup> 894	1,788	4,080
1958 <sup>2</sup> .....	18	21	-	<sup>1</sup> 81	<sup>1</sup> 9276	<sup>1</sup> 81	162	276
1954.....	<sup>1</sup> 9	9	1	<sup>1</sup> 999	<sup>1</sup> 9438	<sup>1</sup> 999	200	438

See footnotes at end of table.

TABLE 1. General Statistics: 1963 and Earlier Years—Continued

Industry, industry code, and year	Value added in mining (\$1,000)	Cost of supplies, minerals received for preparation, fuels, purchased electric energy, and contract work (\$1,000)	Cost of purchased machinery installed (\$1,000)	Value of shipments and receipts (\$1,000)	Value of net shipments and receipts <sup>13</sup> (\$1,000)	Quantity of primary products <sup>14</sup> (1,000 short tons)	Capital expenditures (\$1,000)	Horsepower rating of power equipment (1,000 hp)
ALL STONE QUARRIES—Continued								
Dimension stone quarries—Continued								
Dimension granite quarries—Continued								
Quarries with dressing plants (included in manufactures).....								
1963.....	19,690	11,918	793	31,457	29,881	409	944	(NA)
1958.....	20,230	8,609	493	28,831	25,913	430	501	(NA)
1954.....	16,386	6,394	600	22,760	21,995	380	620	55
Dimension stone quarries, n.e.c., total.....								
1963.....	29,468	14,467	2,183	43,572	41,971	965	2,546	(NA)
1958.....	26,430	8,699	1,417	34,636	32,424	949	1,910	(NA)
1954.....	24,112	6,043	976	29,912	28,487	957	1,219	105
1929.....	19,116	3,271	(NA)	(NA)	22,387	1,763	577	89
Quarries only (dimension stone quarries, n.e.c., subindustry).....								
1963.....	5,382	1,508	351	6,794	6,736	457	447	33
1958.....	5,250	1,197	148	6,113	6,028	507	482	(NA)
1954.....	7,623	1,900	507	9,453	(NA)	525	577	46
1929.....	1,241	306	(NA)	(NA)	1,547	(NA)	(NA)	13
Quarries with dressing plants (included in manufactures).....								
1963.....	24,086	12,959	1,832	36,778	35,235	508	2,099	(NA)
1958.....	21,180	7,502	1,269	28,523	26,396	442	1,428	(NA)
1954.....	16,489	4,143	469	20,459	19,205	432	642	59
Crushed and broken stone quarries, total.....								
1963.....	705,553	266,918	(NA)	949,791	930,650	587,860	(NA)	(NA)
1958 <sup>2</sup> .....	566,066	210,866	(NA)	759,414	745,643	2,476,255	(NA)	(NA)
1954 <sup>2</sup> .....	436,565	150,254	(NA)	586,588	579,853	364,811	(NA)	(NA)
1939 <sup>3</sup> .....	75,886	1,625,695	(NA)	(NA)	101,581	130,428	(NA)	961
1929.....	100,001	1,635,304	(NA)	(NA)	135,305	161,939	(NA)	608
Industry 1421.—Crushed and broken stone.....								
1963.....	581,655	235,885	60,007	794,860	775,719	474,413	82,687	4,269
1958 <sup>2</sup> .....	449,419	188,780	51,828	620,681	606,910	2,385,898	1,09,346	(NA)
1954 <sup>2</sup> .....	339,530	128,442	44,971	467,741	461,006	283,659	45,202	2,797
1939 <sup>3</sup> .....	59,358	20,248	(NA)	79,606	(NA)	90,686	(NA)	875
1929.....	(NA)	26,245	(NA)	(NA)	104,273	104,294	(NA)	423
Quarries in manufacturing establishments.....								
1963.....	123,898	31,033	(NA)	154,931	221,54,931	113,447	(NA)	(NA)
1958.....	116,647	22,086	(NA)	221,38,733	138,733	90,357	(NA)	(NA)
1954.....	97,035	21,812	(NA)	221,18,847	118,847	81,157	(NA)	(NA)
1939.....	16,528	5,447	(NA)	(NA)	21,975	39,278	(NA)	86
1929.....	(NA)	8,425	(NA)	(NA)	31,032	57,645	(NA)	185
Crushed and broken limestone quarries, total.....								
1963.....	520,606	180,223	(NA)	681,938	667,052	460,834	(NA)	(NA)
1958 <sup>2</sup> .....	450,171	162,231	(NA)	596,962	584,785	2,383,265	(NA)	(NA)
1954 <sup>2</sup> .....	334,862	109,794	(NA)	445,305	440,251	299,926	(NA)	(NA)
1939 <sup>3</sup> .....	57,960	19,187	(NA)	(NA)	77,147	108,400	(NA)	756
1929.....	71,412	26,528	(NA)	(NA)	97,940	133,279	(NA)	461
Crushed and broken limestone subindustry.....								
1963.....	408,450	153,327	40,644	542,886	528,000	355,812	59,535	3,219
1958 <sup>2</sup> .....	334,803	140,280	39,088	459,643	447,466	2,293,633	54,528	(NA)
1954 <sup>2</sup> .....	239,604	88,504	32,622	328,757	323,703	220,233	31,973	2,183
1939 <sup>3</sup> .....	41,432	13,740	(NA)	(NA)	55,172	69,124	(NA)	670
1929.....	(NA)	17,684	(NA)	(NA)	66,908	75,634	(NA)	276
Quarries in manufacturing establishments.....								
1963.....	112,156	26,896	(NA)	221,39,052	139,052	105,022	(NA)	(NA)
1958.....	115,368	21,951	(NA)	221,37,319	137,319	89,632	(NA)	(NA)
1954.....	95,258	21,290	(NA)	221,16,548	116,548	79,693	(NA)	(NA)
1939.....	16,528	5,447	(NA)	(NA)	21,975	39,278	(NA)	86
1929.....	(NA)	8,425	(NA)	(NA)	31,032	57,645	(NA)	185
Crushed and broken granite quarries, total.....								
1963.....	62,020	28,892	(NA)	90,213	90,026	48,897	(NA)	(NA)
1958 <sup>20</sup> .....	33,493	14,968	5,838	49,596	49,391	33,301	4,703	(NA)
1954 <sup>21</sup> .....	22,383	8,993	153,041	31,230	(NA)	21,958	153,187	151,69
1939 <sup>3</sup> .....	5,042	1,988	(NA)	(NA)	7,030	6,682	(NA)	48
1929.....	4,871	1,880	(NA)	(NA)	6,751	9,951	(NA)	38
Crushed and broken granite subindustry.....								
1963.....	61,702	28,746	6,486	89,749	89,562	48,672	7,185	362
Quarries in manufacturing establishments.....								
1963.....	318	146	(NA)	22,464	464	225	(NA)	(NA)
Crushed and broken stone, n.e.c., quarries, total.....								
1963.....	122,927	57,803	(NA)	177,640	173,572	76,521	(NA)	(NA)
1958 <sup>20</sup> .....	82,402	33,667	(NA)	112,856	111,467	257,372	(NA)	(NA)
1954 <sup>2</sup> .....	78,208	31,109	(NA)	108,550	(NA)	41,652	(NA)	(NA)
1939 <sup>3</sup> .....	12,884	4,520	(NA)	(NA)	17,404	15,346	(NA)	157
1929.....	23,718	6,896	(NA)	(NA)	30,614	22,709	(NA)	109
Crushed and broken stone, n.e.c., subindustry.....								
1963.....	111,503	53,812	12,877	162,225	158,157	68,449	15,967	688
1958.....	81,123	33,532	6,902	111,442	110,053	256,647	10,115	(NA)
1954 <sup>2</sup> .....	76,613	30,760	9,082	106,606	(NA)	40,453	9,849	430
Quarries in manufacturing establishments.....								
1963.....	11,424	3,991	(NA)	221,15,415	15,415	8,072	(NA)	(NA)
1958 <sup>20</sup> .....	1,279	135	(NA)	221,1,414	1,414	725	(NA)	(NA)
1954.....	1,595	349	(NA)	221,1,944	1,944	1,199	(NA)	(NA)

See footnotes at end of table.

TABLE 1. General Statistics: 1963 and Earlier Years—Continued

## Footnotes for Table 1--14B

Note: For explanations of column captions see appendix A. For more detailed historical statistics for these industries see table 1 of the corresponding chapter of the 1954 Census of Mineral Industries, Vol. 1.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. n.e.c. Not elsewhere classified.

<sup>1</sup>Represents the sum of figures shown for the separate industries or subindustries and probably includes some duplication due to the same company operating in more than one industry or subindustry.

<sup>2</sup>Revised in the 1958 census to include figures for establishments primarily engaged in producing "Quartz." Such establishments had been included in the Natural Abrasives, Except Sand, Industry for 1954 only.

<sup>3</sup>The total for "All stone quarries" includes data for 5 nonproducing operations. Except for number of establishments, figures by kind of stone exclude data for these establishments. The number of quarries of this type reported were: dimension granite, 2; crushed and broken limestone, 2; and crushed and broken stone, n.e.c., 1.

<sup>4</sup>Represents number of quarries.

<sup>5</sup>Excludes data for dimension stone dressing plants operated in conjunction with quarries. The value added in dressing stone at such operations was approximately \$1,555 thousand for plants at limestone quarries, \$2,266 thousand for plants at granite quarries, and \$4,102 thousand for plants at stone quarries, n.e.c.

<sup>6</sup>Excludes data for nonproducing operations as follows: for 1929, limestone, 1 establishment; granite, 2 establishments; and stone, n.e.c., 9 establishments; for 1919, limestone, 1 establishment; and stone, n.e.c., 2 establishments.

<sup>7</sup>The figures for number of operating companies and number of establishments include data for 2 nonproducing establishments for which other data are combined with figures for metal mining.

<sup>8</sup>Includes data for central offices serving more than one subindustry. These were not included in the subindustry figures shown.

<sup>9</sup>Includes lime plants and their associated quarries. In 1902, the value of lime produced at establishments including a quarry was \$9,336 thousand.

<sup>10</sup>Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.

<sup>11</sup>Probably includes data for separately operated stone dressing plants.

<sup>12</sup>Includes a portion of the products purchased for resale without further processing, amounting to less than \$1,350 thousand for all limestone quarries; to less than \$900 thousand for all dimension stone quarries; to less than \$200 thousand for all dimension stone quarries only; to less than \$800 thousand for all dimension stone quarries with dressing plants.

<sup>13</sup>For 1939 and earlier years, represents value of production and other receipts.

<sup>14</sup>Represents the product indicated by the name of the industry or subindustry (Industry group and industry totals for all stone, therefore, exceed the sum of the totals for the subindustries). For 1963, 1958, and 1954, for the mineral industries and for dimension stone quarries in manufactures, represents net shipments (gross shipments less stone received for dressing or crushing). For crushed and broken stone quarries in manufacturing establishments, represents gross shipments of stone plus production of stone for use in the same establishment in the manufacture of cement, lime, or other manufactured products. For 1939 and earlier years, represents net production.

<sup>15</sup>Excludes figures for crushed and broken stone quarries in manufacturing establishments and, for horsepower in 1963, excludes figures for quarries with dressing plants included in manufactures.

<sup>16</sup>Excludes the cost of stone received for preparation.

<sup>17</sup>Represents cost of explosives.

<sup>18</sup>Includes crushed and broken stone produced as a secondary product at dimension stone quarries.

<sup>19</sup>Number of production, development, and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations, hence, the same figures are shown for production, development, and exploration workers and for all employees.

<sup>20</sup>Figures for one granite quarry in a manufacturing establishment are included with the figures for such crushed and broken stone, n.e.c., quarries.

<sup>21</sup>Includes data for 3 mining operations in manufacturing establishments.

<sup>22</sup>Includes the estimated value of crushed or broken stone produced and used in the same establishment in the manufacture of cement, lime, and other manufactured products.

TABLE 2. General Statistics by Geographic Areas and Type of Operation: 1963 and 1958

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of net shipments of primary products <sup>2</sup>	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 short tons)	(\$1,000)	(number)	(\$1,000)
ALL DIMENSION STONE QUARRIES														
Dimension stone quarries, total.....	551	107	10,987	46,759	9,640	19,462	39,061	70,908	40,327	106,178	3,016	5,057	12,250	67,131
Quarries only, (Industry 1411.—Dimension stone industry).....	319	25	2,156	7,844	1,970	3,820	6,986	14,842	6,007	19,735	1,330	1,114	2,306	13,076
Quarries with dressing plants....	232	82	8,831	38,915	7,670	15,642	32,075	56,066	34,320	86,443	1,686	3,943	9,944	54,055
Geographic Area														
New England, total.....	52	17	2,310	11,222	2,054	4,361	9,425	16,490	8,986	24,310	388	1,166	2,831	14,924
Quarries only.....	21	4	389	1,960	356	742	1,708	3,609	1,428	4,784	185	253	204	1,037
Quarries with dressing plants....	31	13	1,921	9,262	1,698	3,619	7,717	12,881	7,558	19,526	203	913	2,627	13,887
Vermont.....	22	8	1,559	7,038	1,431	3,095	6,277	10,659	5,583	15,499	219	743	1,963	9,750
Massachusetts.....	13	4	389	2,375	299	620	1,600	3,374	1,594	4,882	124	86	(NA)	(NA)
Middle Atlantic, total.....	84	13	970	3,958	875	1,716	3,399	5,602	3,296	8,546	292	352	1,091	6,002
Quarries only.....	46	3	270	864	243	431	739	1,514	504	1,890	170	128	(NA)	(NA)
Quarries with dressing plants....	38	10	700	3,094	632	1,285	2,660	4,088	2,792	6,656	122	224	(NA)	(NA)
New York, total.....	22	3	206	779	181	341	673	1,330	833	2,043	68	120	(NA)	(NA)
Quarries only.....	10	1	76	280	65	122	225	587	184	729	49	42	69	473
Quarries with dressing plants....	12	2	130	499	116	219	448	743	649	1,314	19	78	(NA)	(NA)
Pennsylvania, total.....	62	10	764	3,179	694	1,375	2,726	4,272	2,463	6,503	224	232	821	4,237
Quarries only.....	36	2	194	584	178	309	514	927	320	1,161	121	86	196	1,088
Quarries with dressing plants....	26	8	570	2,595	516	1,066	2,212	3,345	2,143	5,342	103	146	625	3,149
East North Central, total.....	111	22	2,385	11,429	2,101	4,198	9,591	16,766	7,471	23,244	1,099	993	2,573	15,947
Quarries only.....	60	5	362	1,576	313	626	1,332	3,078	878	3,765	327	191	(NA)	(NA)
Quarries with dressing plants....	51	17	2,023	9,853	1,788	3,572	8,259	13,688	6,593	19,479	772	802	(NA)	(NA)
Ohio.....	14	3	569	2,634	492	966	2,097	3,906	1,069	4,857	115	118	331	1,726
Indiana, total.....	31	11	1,352	6,606	1,203	2,429	5,639	9,688	4,386	13,444	792	630	1,767	11,399
Quarries only.....	16	3	177	891	156	337	803	2,039	340	2,259	222	120	398	2,951
Quarries with dressing plants....	15	8	1,175	5,715	1,047	2,092	4,836	7,649	4,046	11,185	570	510	1,369	8,448
Wisconsin, total.....	50	7	382	1,915	332	670	1,617	2,858	1,798	4,447	156	209	399	2,419
Quarries only.....	25	2	108	367	99	186	335	687	383	1,031	53	39	93	524
Quarries with dressing plants....	25	5	274	1,548	233	484	1,282	2,171	1,415	3,416	103	170	306	1,895
West North Central, total.....	50	10	1,226	5,556	1,027	2,258	4,219	10,031	5,063	14,627	192	467	1,692	10,850
Quarries only.....	30	1	171	595	162	327	570	1,410	631	1,961	116	80	(NA)	(NA)
Quarries with dressing plants....	20	9	1,055	4,961	865	1,931	3,649	8,621	4,432	12,666	76	387	(NA)	(NA)
Minnesota, total.....	19	5	433	2,259	348	777	1,647	4,476	1,458	5,803	71	131	972	6,708
Quarries only.....	14	-	58	212	56	109	208	456	234	679	36	11	88	402
Quarries with dressing plants....	5	5	375	2,047	292	668	1,439	4,020	1,224	5,124	35	120	884	6,306
South Dakota (quarries only).....	3	-	43	178	42	85	175	456	181	629	13	8	29	419
South Atlantic, total.....	68	22	2,046	7,387	1,816	3,520	6,182	10,974	7,185	17,340	473	819	1,978	8,302
Quarries only.....	32	4	276	824	259	511	754	1,359	638	1,902	120	95	429	1,809
Quarries with dressing plants....	36	18	1,770	6,563	1,557	3,009	5,428	9,615	6,547	15,438	353	724	1,549	6,493
Virginia.....	8	2	190	623	161	330	512	1,239	553	1,606	38	186	(NA)	(NA)
North Carolina.....	11	3	402	1,360	362	642	1,134	1,676	997	2,571	33	102	495	2,182
Georgia, total.....	39	16	1,367	5,126	1,213	2,388	4,291	7,475	5,406	12,401	338	480	1,106	4,751
Quarries only.....	15	3	140	392	135	244	381	582	378	910	55	50	266	1,147
Quarries with dressing plants....	24	13	1,227	4,734	1,078	2,144	3,910	6,893	5,028	11,491	283	430	840	3,604
East South Central, total.....	37	9	999	2,999	883	1,661	2,636	3,982	2,832	6,044	122	770	1,277	6,076
Quarries only.....	26	3	242	569	227	377	528	1,025	263	1,238	46	50	304	1,306
Quarries with dressing plants....	11	6	757	2,430	656	1,284	2,108	2,957	2,569	4,806	76	720	973	4,770
Tennessee.....	28	7	757	2,030	671	1,217	1,767	2,455	1,887	4,140	64	202	997	4,172
West South Central, total.....	42	8	498	1,876	405	866	1,625	3,279	2,549	5,627	261	201	518	2,678
Quarries only.....	29	4	210	717	198	435	685	1,317	868	2,037	210	148	188	963
Quarries with dressing plants....	13	4	288	1,159	207	431	940	1,962	1,681	3,590	51	53	330	1,715
Arkansas.....	12	3	95	228	88	152	216	362	213	537	19	38	142	465
Oklahoma.....	13	-	49	145	46	74	137	660	142	773	32	29	97	447
Texas, total.....	17	5	354	1,503	271	640	1,272	2,257	2,194	4,317	210	134	279	1,785
Quarries only.....	11	2	110	477	104	282	451	588	682	1,181	164	89	100	556
Quarries with dressing plants....	6	3	244	1,026	167	358	821	1,669	1,512	3,136	46	45	179	1,229
Mountain, total.....	37	2	197	668	170	290	569	1,047	468	1,437	55	78	116	694
Quarries only.....	21	1	97	223	89	135	207	369	151	491	36	29	(NA)	(NA)
Quarries with dressing plants....	16	1	100	445	81	155	362	678	317	946	19	49	(NA)	(NA)
Arizona.....	9	-	75	206	64	103	177	351	239	555	21	35	(NA)	(NA)

See footnotes at end of table.



TABLE 2. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of sup- plies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of net shipments of primary products <sup>2</sup>  (1,000 short tons)	Capital expendi- tures	All em- ployees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
ALL DIMENSION STONE QUARRIES—Con.														
Geographic Area—Continued														
Pacific, total.....	70	4	356	1,664	309	592	1,415	2,737	2,477	5,003	134	211	174	1,658
Quarries only.....	54	-	139	516	123	236	463	1,161	646	1,667	120	140	68	785
Quarries with dressing plants....	16	4	217	1,148	186	356	952	1,576	1,831	3,336	14	71	106	873
California, total.....	49	3	277	1,359	246	486	1,150	2,294	2,303	4,446	97	151	119	1,127
Quarries only.....	39	-	101	402	91	179	360	956	530	1,400	90	86	51	604
Quarries with dressing plants....	10	3	176	957	155	307	790	1,338	1,773	3,046	7	65	68	523
DIMENSION LIMESTONE QUARRIES														
United States, total.....	110	22	2,159	10,268	1,853	3,772	8,679	15,237	7,666	21,721	1,138	1,182	2,631	16,386
Quarries only.....	61	5	326	1,266	286	568	1,108	2,947	848	3,513	369	282	583	3,741
Quarries with dressing plants....	49	17	1,833	9,002	1,567	3,204	7,571	12,290	6,818	18,208	769	900	2,048	12,645
Geographic Area														
East North Central, total.....	54	14	1,508	7,711	1,324	2,715	6,515	11,010	5,638	15,891	873	757	1,940	12,508
Quarries only.....	23	3	164	830	141	313	724	1,918	418	2,214	216	122	377	2,754
Quarries with dressing plants....	31	11	1,344	6,881	1,183	2,402	5,791	9,092	5,220	13,677	657	635	1,563	9,754
Indiana, total.....	23	11	1,284	6,358	1,144	2,323	5,422	9,270	4,215	12,901	763	584	1,669	10,659
Quarries only.....	12	3	145	767	126	282	683	1,849	285	2,029	203	105	343	2,506
Quarries with dressing plants....	11	8	1,139	5,591	1,018	2,041	4,739	7,421	3,930	10,872	560	479	1,326	8,153
Wisconsin.....	26	3	202	1,266	163	359	1,034	1,699	1,317	2,858	101	158	248	1,705
West North Central.....	19	5	304	1,396	265	544	1,095	1,788	1,038	2,679	92	147	309	1,602
Quarries with dressing plants....	10	4	254	1,284	217	455	987	1,558	861	2,327	47	92	253	1,453
South.....	23	2	284	976	210	421	909	1,980	858	2,621	105	217	317	1,787
West South Central.....	14	1	136	378	78	143	359	850	410	1,202	50	58	(NA)	(NA)
Texas.....	5	1	125	358	68	131	340	780	375	1,105	41	50	(NA)	(NA)
DIMENSION GRANITE QUARRIES														
United States, total.....	137	42	3,470	15,937	3,009	6,099	12,738	26,203	16,011	40,885	913	1,329	3,897	24,315
Quarries only.....	66	10	824	3,601	773	1,645	3,271	6,513	3,300	9,428	504	385	740	4,085
Quarries with dressing plants....	71	32	2,646	12,336	2,236	4,454	9,467	19,690	12,711	31,457	409	944	3,157	20,230
Geographic Area														
New England, total.....	28	11	1,013	5,548	869	1,771	4,363	8,442	4,193	12,072	277	563	1,225	8,801
Quarries only.....	13	4	361	1,873	329	687	1,622	3,446	1,335	4,580	163	201	156	918
Quarries with dressing plants....	15	7	652	3,675	540	1,084	2,741	4,996	2,858	7,492	114	362	1,069	7,883
Maine (quarries with dressing plants).....	3	3	186	846	174	333	784	775	355	1,095	11	35	(NA)	(NA)
Middle Atlantic.....	8	1	74	377	62	119	288	500	408	874	14	34	33	288
Quarries with dressing plants....	5	1	62	345	51	98	258	496	373	835	5	34	(NA)	(NA)
Pennsylvania.....	5	1	62	339	52	99	257	437	361	770	11	28	(NA)	(NA)
North Central, total.....	30	7	575	2,684	475	1,038	2,042	5,989	1,843	7,648	94	184	1,135	7,765
Quarries only.....	22	1	153	603	144	288	569	1,241	645	1,849	74	37	(NA)	(NA)
Quarries with dressing plants....	8	6	422	2,081	331	750	1,473	4,748	1,198	5,799	20	147	(NA)	(NA)
South Dakota (quarries only).....	3	-	43	178	42	85	175	456	181	629	13	8	(NA)	(NA)
South Atlantic, total.....	44	16	1,318	4,844	1,173	2,201	3,983	7,512	5,650	12,822	308	340	1,123	5,040
Quarries only.....	18	3	160	457	155	288	446	727	422	1,108	60	41	324	1,408
Quarries with dressing plants....	26	13	1,158	4,387	1,018	1,913	3,537	6,785	5,228	11,714	248	299	799	3,632
Georgia (quarries only).....	10	3	127	361	123	225	353	514	339	816	46	37	636	2,868
West South Central, total.....	10	4	248	1,226	222	544	1,009	1,963	1,891	3,755	185	99	288	1,717
Quarries only.....	5	2	104	476	102	281	459	897	683	1,501	170	79	51	280
Quarries with dressing plants....	5	2	144	750	120	263	550	1,066	1,208	2,254	15	20	237	1,437
Oklahoma.....	5	-	42	134	40	68	127	615	110	701	27	24	(NA)	(NA)
Texas.....	5	4	206	1,092	182	476	882	1,348	1,781	3,054	158	75	(NA)	(NA)
West.....	17	3	242	1,258	208	426	1,053	1,797	2,026	3,714	35	109	93	704
Quarries with dressing plants....	12	3	208	1,098	176	346	908	1,599	1,846	3,363	7	82	72	492
Pacific.....	13	3	215	1,121	185	385	936	1,542	1,945	3,392	34	95	(NA)	(NA)
California.....	10	3	203	1,086	180	375	904	1,490	1,925	3,324	33	91	(NA)	(NA)
DIMENSION STONE, N.E.C., QUARRIES														
United States, total.....	304	43	5,358	20,554	4,778	9,591	17,644	29,468	16,650	43,572	965	2,546	5,722	26,430
Quarries only.....	192	10	1,006	2,977	911	1,607	2,607	5,382	1,859	6,794	457	447	983	5,250
Quarries with dressing plants....	112	33	4,352	17,577	3,867	7,984	15,037	24,086	14,791	36,778	508	2,099	4,739	21,180

See footnotes at end of table.

**TABLE 2. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of sup- plies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of net shipments of primary products <sup>2</sup>	Capital expendi- tures	All em- ployees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 short tons)	(\$1,000)	(number)	(\$1,000)
DIMENSION STONE, N.E.C., QUARRIES—Continued														
Geographic Area														
New England.....	24	6	1,297	5,674	1,185	2,590	5,062	8,048	4,793	12,238	100	603	1,606	6,123
Quarries with dressing plants....	16	6	1,269	5,587	1,158	2,535	4,976	7,885	4,700	12,034	79	551	1,558	6,004
Middle Atlantic, total.....	70	11	860	3,466	782	1,540	3,013	4,826	2,800	7,346	234	280	1,016	5,421
Quarries only.....	37	2	222	717	201	353	611	1,234	381	1,525	117	90	216	1,221
Quarries with dressing plants....	33	9	638	2,749	581	1,187	2,402	3,592	2,419	5,821	117	190	800	4,200
New York.....	16	2	162	636	144	272	554	1,018	703	1,642	30	79	241	1,457
Quarries with dressing plants....	10	2	121	465	109	205	421	688	605	1,221	17	72	183	1,086
Pennsylvania, total.....	54	9	698	2,830	638	1,268	2,459	3,808	2,097	5,704	204	201	775	3,964
Quarries only.....	31	2	181	546	166	286	478	904	283	1,104	104	83	158	850
Quarries with dressing plants....	23	7	517	2,284	472	982	1,981	2,904	1,814	4,600	100	118	617	3,114
North Central, total.....	58	6	1,224	5,194	1,064	2,159	4,158	8,010	4,015	11,693	233	372	881	4,922
Quarries only.....	36	1	166	626	142	263	501	1,099	269	1,311	109	57	(NA)	(NA)
Quarries with dressing plants....	22	5	1,058	4,568	922	1,896	3,657	6,911	3,746	10,342	124	315	(NA)	(NA)
Indiana.....	8	-	68	248	59	106	217	418	171	543	29	46	98	740
South.....	70	17	1,693	5,216	1,499	2,881	4,542	6,780	4,167	9,813	258	1,134	2,045	8,512
West South Central.....	18	3	114	272	105	179	257	466	248	670	26	44	119	417
Mountain.....	31	2	165	512	143	241	436	761	378	1,078	51	61	97	586
Arizona.....	9	-	75	206	64	103	177	351	239	555	21	35	(NA)	(NA)
Pacific.....	51	1	119	492	105	180	433	1,043	497	1,444	89	96	77	866
Quarries only.....	44	-	86	322	75	135	289	828	442	1,177	81	93	(NA)	(NA)
California.....	34	-	52	222	47	84	200	657	344	960	54	41	(NA)	(NA)
ALL CRUSHED AND BROKEN STONE QUARRIES														
Crushed and broken stone industry and crushed stone in manufactures, total	2,586	767	49,120	260,529	42,070	92,602	209,257	705,553	326,925	949,791	587,860	(NA)	<sup>3</sup> 46,711	<sup>3</sup> 566,066
Industry 1421.—Crushed and broken stone.....	2,256	668	43,236	229,115	36,186	80,834	177,843	581,655	295,892	794,860	474,413	82,687	<sup>3</sup> 41,730	<sup>3</sup> 449,419
Crushed stone quarries in manu- factures.....	330	99	<sup>4</sup> 5,884	<sup>4</sup> 31,414	<sup>4</sup> 5,884	11,768	31,414	123,898	31,033	<sup>5</sup> 154,931	113,447	(NA)	<sup>3</sup> 44,981	<sup>3</sup> 116,647
Geographic Area														
New England, total.....	62	21	1,263	7,509	1,079	2,363	6,067	19,519	7,112	25,237	13,293	(NA)	1,210	14,872
Crushed and broken stone industry	40	16	880	5,460	696	1,595	4,018	10,911	4,967	14,484	8,042	1,394	1,094	11,022
Crushed stone quarries in manu- factures.....	22	5	<sup>4</sup> 383	<sup>4</sup> 2,049	<sup>4</sup> 383	768	2,049	8,608	2,145	<sup>5</sup> 10,753	5,251	(NA)	<sup>4</sup> 116	3,850
Maine.....	7	3	<sup>4</sup> 109	<sup>4</sup> 506	<sup>4</sup> 102	218	454	1,389	401	<sup>5</sup> 1,734	923	(NA)	<sup>6</sup> 96	<sup>6</sup> 606
Vermont (crushed and broken stone industry).....	7	1	95	495	81	196	351	1,027	594	1,405	803	216	158	1,686
Massachusetts, total.....	24	9	517	2,872	431	909	2,344	7,675	3,302	10,430	5,952	(NA)	450	6,640
Crushed and broken stone industry	13	7	393	2,258	307	662	1,730	4,575	1,932	5,960	3,000	547	400	4,464
Crushed stone quarries in manufactures.....	11	2	<sup>4</sup> 124	<sup>4</sup> 614	<sup>4</sup> 124	247	614	3,100	1,370	<sup>5</sup> 4,470	2,952	(NA)	<sup>4</sup> 50	2,176
Connecticut, total.....	18	6	461	3,259	397	896	2,669	8,516	2,490	10,575	5,101	(NA)	(NA)	(NA)
Crushed and broken stone industry	13	5	271	2,135	207	515	1,545	4,073	2,059	5,701	3,613	431	397	3,971
Crushed stone quarries in manu- factures.....	5	1	<sup>4</sup> 190	<sup>4</sup> 1,124	<sup>4</sup> 190	381	1,124	4,443	431	<sup>5</sup> 4,874	1,488	(NA)	(NA)	(NA)
Middle Atlantic, total.....	331	126	8,563	52,712	6,907	15,329	39,097	131,486	60,014	176,718	88,986	(NA)	8,793	115,940
Crushed and broken stone industry	276	105	7,402	46,187	5,746	13,008	32,572	109,545	54,183	148,946	70,686	14,782	7,561	89,266
Crushed stone quarries in manu- factures.....	55	21	<sup>4</sup> 1,161	<sup>4</sup> 6,525	<sup>4</sup> 1,161	2,321	6,525	21,941	5,831	<sup>5</sup> 27,772	18,300	(NA)	<sup>4</sup> 1,232	26,674
New York, total.....	81	32	2,355	15,895	1,867	4,168	11,862	39,730	15,459	51,834	26,510	(NA)	2,311	35,918
Crushed and broken stone industry	67	28	2,176	14,832	1,688	3,811	10,799	35,958	14,506	47,109	22,906	3,355	2,068	30,195
Crushed stone quarries in manufactures.....	14	4	<sup>4</sup> 179	<sup>4</sup> 1,063	<sup>4</sup> 179	357	1,063	3,772	953	<sup>5</sup> 4,725	3,604	(NA)	<sup>4</sup> 243	5,723
New Jersey, total.....	36	25	1,766	12,494	1,288	3,118	7,912	27,225	13,971	37,122	13,228	(NA)	(NA)	(NA)
Crushed and broken stone industry	30	23	1,522	11,319	1,044	2,630	6,737	25,184	13,526	34,636	12,133	4,074	1,138	14,747
Crushed stone quarries in manu- factures.....	6	2	<sup>4</sup> 244	<sup>4</sup> 1,175	<sup>4</sup> 244	488	1,175	2,041	445	<sup>5</sup> 2,486	1,095	(NA)	(NA)	(NA)
Pennsylvania, total.....	214	69	4,442	24,323	3,752	8,043	19,323	64,531	30,584	87,762	49,248	(NA)	5,344	65,275
Crushed and broken stone industry	179	54	3,704	20,036	3,014	6,567	15,036	48,403	26,151	67,201	35,647	7,353	4,355	44,324
Crushed stone quarries in manu- factures.....	35	15	<sup>4</sup> 738	<sup>4</sup> 4,287	<sup>4</sup> 738	1,476	4,287	16,128	4,433	<sup>5</sup> 20,561	13,601	(NA)	<sup>4</sup> 989	20,951

See footnotes at end of table.

TABLE 2. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Industry, geographic area, and type of operation <sup>1</sup>	1963												1958	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of net shipments of primary products <sup>2</sup> (1,000 short tons)	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 short tons)	(\$1,000)	(number)	(\$1,000)	
ALL CRUSHED AND BROKEN STONE QUARRIES—Continued														
Geographic Area—Continued														
East North Central, total.....	523	125	10,243	57,400	8,589	18,471	44,985	150,052	66,140	199,453	138,025	(NA)	10,994	134,929
Crushed and broken stone industry	466	110	9,305	52,224	7,651	16,594	39,809	130,419	60,559	174,239	116,245	16,739	10,066	114,249
Crushed stone quarries in manu- factures.....	57	15	4938	45,176	4938	1,877	5,176	19,633	5,581	525,214	21,780	(NA)	4928	20,680
Ohio, total.....	132	42	3,177	16,859	2,744	6,032	13,811	44,045	19,635	58,507	39,151	(NA)	4,022	43,126
Crushed and broken stone industry	105	34	2,678	14,082	2,245	5,033	11,034	35,578	16,770	47,175	29,810	5,173	3,485	30,323
Crushed stone quarries in manu- factures.....	27	8	4499	42,777	4499	999	2,777	8,467	2,865	511,332	9,341	(NA)	4537	12,803
Indiana, total.....	87	28	1,444	7,426	1,157	2,702	5,827	18,524	9,235	24,921	19,070	(NA)	(NA)	(NA)
Crushed and broken stone industry	82	27	1,371	6,999	1,084	2,557	5,400	16,969	8,650	22,781	16,244	2,838	1,169	12,989
Crushed stone quarries in manu- factures.....	5	1	473	427	473	145	427	1,555	585	52,140	2,826	(NA)	(NA)	(NA)
Illinois, total.....	163	35	2,722	15,800	2,300	5,082	12,170	42,823	18,123	56,499	38,692	(NA)	2,796	45,358
Crushed and broken stone industry	150	32	2,478	14,514	2,056	4,594	10,884	38,455	16,778	50,786	34,095	4,447	2,669	41,725
Crushed stone quarries in manu- factures.....	13	3	4244	41,286	4244	488	1,286	4,368	1,345	55,713	4,597	(NA)	4127	3,633
Michigan, total.....	52	9	1,473	9,331	1,228	2,254	6,931	28,483	6,585	33,439	29,841	(NA)	(NA)	(NA)
Crushed and broken stone industry	44	6	1,364	8,690	1,119	2,035	6,290	23,336	5,851	27,558	24,978	1,629	1,615	18,444
Crushed stone quarries in manu- factures.....	8	3	4109	4641	4109	219	641	5,147	734	55,881	4,863	(NA)	(NA)	(NA)
Wisconsin.....	89	11	4,427	47,984	4,160	2,401	6,246	16,177	12,562	526,087	11,271	(NA)	(NA)	(NA)
Crushed and broken stone industry	85	11	1,414	7,939	1,147	2,375	6,201	16,081	12,510	25,939	11,118	2,652	1,128	10,768
West North Central, total.....	459	100	6,351	32,283	5,490	12,317	26,228	79,276	40,415	107,574	69,402	(NA)	6,085	72,894
Crushed and broken stone industry	428	86	5,691	29,048	4,830	10,998	22,993	64,566	37,656	90,105	56,397	12,117	5,462	57,426
Crushed stone quarries in manu- factures.....	31	14	4660	43,235	4660	1,319	3,235	14,710	2,759	517,469	13,005	(NA)	4623	15,468
Minnesota (crushed and broken stone industry).....	27	9	399	2,040	323	634	1,453	4,174	2,313	5,987	4,013	500	542	4,354
Iowa <sup>6</sup> .....	115	21	1,600	8,674	1,317	3,239	6,351	20,543	10,838	27,701	18,212	3,680	1,731	20,383
Missouri, total.....	182	43	2,824	14,003	2,468	5,330	11,790	35,563	16,973	46,648	28,625	(NA)	2,350	26,963
Crushed and broken stone industry	171	36	2,482	12,222	2,126	4,647	10,009	27,081	15,624	36,817	21,794	5,888	1,966	18,725
Crushed stone quarries in manu- factures.....	11	7	4342	41,781	4342	683	1,781	8,482	1,349	59,831	6,831	(NA)	4384	8,238
North Dakota and South Dakota <sup>6</sup> .....	7	4	123	584	80	191	357	896	994	1,649	607	241	147	2,075
Nebraska <sup>6</sup> .....	24	5	290	1,507	259	631	1,275	2,855	2,728	5,145	2,911	438	280	3,327
Kansas, total.....	93	13	918	4,398	846	1,898	3,925	11,638	5,470	15,738	11,330	(NA)	901	11,656
Crushed and broken stone industry	84	11	797	4,021	725	1,656	3,548	9,017	5,159	12,806	8,860	1,370	796	8,562
Crushed stone quarries in manu- factures.....	9	2	4121	4377	4121	242	377	2,621	311	52,932	2,470	(NA)	4105	3,094
South Atlantic, total.....	388	180	9,796	45,621	8,560	19,166	36,779	132,406	66,379	185,505	113,252	(NA)	8,592	93,924
Crushed and broken stone industry	343	165	8,997	42,017	7,761	17,569	33,175	119,744	61,906	168,370	100,196	13,280	8,180	84,591
Crushed stone quarries in manu- factures.....	45	15	4799	43,604	4799	1,597	3,604	12,662	4,473	517,135	13,056	(NA)	4412	9,333
Delaware and Maryland, total.....	34	18	995	5,252	848	1,807	3,737	15,181	8,327	22,337	12,303	(NA)	868	11,325
Crushed and broken stone industry	28	15	755	4,463	608	1,327	2,948	13,293	6,869	18,991	9,801	1,171	815	9,134
Crushed stone quarries in manu- factures (Maryland).....	6	3	4240	4789	4240	480	789	1,888	1,458	53,346	2,502	(NA)	453	2,191
Virginia, total.....	105	56	2,559	11,256	2,237	4,998	9,153	31,923	13,928	42,710	26,222	(NA)	2,031	19,744
Crushed and broken stone industry	95	50	2,326	10,142	2,004	4,533	8,039	28,809	13,009	38,677	23,017	3,141	1,839	15,526
Crushed stone quarries in manu- factures.....	10	6	4233	41,114	4233	465	1,114	3,114	919	54,033	3,205	(NA)	4192	4,218
West Virginia <sup>6</sup> .....	37	9	593	2,995	496	961	2,374	7,030	3,620	10,100	5,504	550	683	6,790
North Carolina <sup>6</sup> .....	52	25	1,135	4,750	962	1,981	3,530	16,481	8,407	23,729	14,224	1,159	1,120	10,394
South Carolina <sup>6</sup> .....	18	13	728	2,734	639	1,402	2,301	9,274	3,891	12,139	7,744	1,026	510	4,176
Georgia <sup>6</sup> .....	37	30	1,789	8,339	1,602	3,725	7,034	23,166	15,718	35,578	17,933	3,306	1,424	17,898
Florida, total.....	94	26	1,817	9,279	1,596	3,932	7,634	26,582	11,483	35,138	26,679	(NA)	(NA)	(NA)
Crushed and broken stone industry	76	23	1,671	8,594	1,450	3,640	6,949	21,691	10,392	29,156	21,973	2,927	1,789	20,673
Crushed stone quarries in manu- factures.....	18	3	4146	4685	4146	292	685	4,891	1,091	55,982	4,706	(NA)	(NA)	(NA)
East South Central, total.....	246	102	5,031	21,905	4,446	9,993	18,390	71,544	31,524	91,639	62,208	(NA)	4,487	45,548
Crushed and broken stone industry	223	93	4,629	19,776	4,044	9,189	16,261	63,162	29,367	81,098	55,096	11,431	4,043	37,868
Crushed stone quarries in manu- factures.....	23	9	4402	42,129	4402	804	2,129	8,382	2,157	510,539	7,112	(NA)	4444	7,680
Kentucky <sup>6</sup> .....	108	47	2,159	9,291	1,872	4,218	7,504	30,142	12,001	37,151	24,138	4,992	1,801	15,478
Tennessee, total.....	89	31	1,578	6,637	1,385	3,182	5,458	23,594	9,679	30,163	23,151	(NA)	1,610	16,363
Crushed and broken stone industry	83	30	1,495	6,149	1,302	3,017	4,970	21,636	9,372	27,898	21,115	3,110	1,436	14,246
Crushed stone quarries in manu- factures.....	6	1	483	4488	483	165	488	1,958	307	52,265	2,036	(NA)	4174	2,117
Alabama, total.....	44	23	1,222	5,590	1,117	2,449	5,041	15,733	9,400	21,804	14,172	(NA)	71,076	713,707
Crushed and broken stone industry	32	16	975	4,336	870	1,954	3,787	11,384	7,994	16,049	9,843	3,329	7806	78,144
Crushed stone quarries in manu- factures.....	12	7	4247	41,254	4247	495	1,254	4,349	1,406	55,755	4,329	(NA)	47270	75,563

See footnotes at end of table.

TABLE 2. **General Statistics by Geographic Areas and Type of Operation:**  
1963 and 1958—Continued

Industry, geographic area, and type of operation <sup>1</sup>	1963												1958	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of sup- plies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of net shipments of primary products <sup>2</sup>	Capital expendi- tures	All em- ployees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 short tons)	(\$1,000)	(number)	(\$1,000)
ALL CRUSHED AND BROKEN STONE QUARRIES—Continued														
Geographic Area—Continued														
West South Central, total.....	129	55	3,375	16,378	2,962	6,779	13,726	49,372	25,441	68,397	45,618	(NA)	2,762	29,529
Crushed and broken stone industry	100	49	3,018	14,721	2,605	6,065	12,069	37,442	23,838	54,864	34,562	6,416	2,372	19,750
Crushed stone quarries in manu- factures.....	29	6	4,357	41,657	4,357	714	1,657	11,930	1,603	513,533	11,056	(NA)	4,390	9,779
Arkansas and Louisiana, total.....	28	11	954	4,801	831	1,932	4,112	16,994	10,716	26,267	9,744	(NA)	(NA)	(NA)
Crushed and broken stone industry	24	11	917	4,595	794	1,857	3,906	14,954	10,445	23,956	8,068	1,443	401	3,266
Crushed stone quarries in manu- factures.....	4	-	437	4,206	437	75	206	2,020	271	52,291	1,676	(NA)	(NA)	(NA)
Oklahoma, total.....	37	15	798	3,856	671	1,530	3,150	10,325	4,332	13,524	12,686	(NA)	(NA)	(NA)
Crushed and broken stone industry	32	15	766	3,681	639	1,466	2,975	8,655	4,047	11,569	10,963	1,133	780	5,362
Crushed stone quarries in manu- factures.....	5	-	432	4,175	432	64	175	1,670	285	51,955	1,723	(NA)	(NA)	(NA)
Texas, total.....	64	29	1,623	7,721	1,460	3,317	6,464	22,073	10,393	28,626	23,188	(NA)	1,466	(D)
Crushed and broken stone industry	44	23	1,335	6,445	1,172	2,742	5,188	13,833	9,346	19,339	15,531	3,840	1,191	11,122
Crushed stone quarries in manu- factures.....	20	6	4,288	41,276	4,288	575	1,276	8,240	1,047	59,287	7,657	(NA)	4,275	(D)
Mountain, total.....	107	10	923	4,757	834	1,623	4,443	15,095	5,164	19,274	11,581	(NA)	1,062	17,318
Crushed and broken stone industry	82	8	646	3,055	557	1,069	2,741	7,841	3,432	10,288	4,977	985	874	10,371
Crushed stone quarries in manu- factures.....	25	2	4,277	41,702	4,277	554	1,702	7,254	1,732	58,986	6,604	(NA)	4,188	6,947
Montana.....	68	-	641	6,212	631	654	6,164	6,635	6,268	6,785	6,543	6,118	457	993
Wyoming.....	7	3	129	698	122	273	621	1,340	582	1,844	1,141	78	87	585
Colorado.....	18	2	149	661	136	285	569	1,400	748	2,048	987	100	216	2,002
New Mexico, total.....	7	-	65	289	63	126	286	1,230	401	1,602	1,184	(NA)	(NA)	(NA)
Crushed and broken stone industry	4	-	40	143	38	77	140	549	198	718	377	29	(NA)	(NA)
Crushed stone quarries in manu- factures.....	3	-	425	4,146	425	49	146	681	203	5884	807	(NA)	(NA)	(NA)
Arizona, total.....	26	1	180	923	170	318	869	3,357	1,145	4,178	2,371	(NA)	(NA)	(NA)
Crushed and broken stone industry	20	1	118	587	108	194	533	1,424	745	1,845	753	324	58	519
Crushed stone quarries in manu- factures.....	6	-	462	4,336	462	124	336	1,933	400	52,333	1,618	(NA)	(NA)	(NA)
Utah, total.....	14	3	191	986	147	290	900	3,090	759	3,608	1,803	(NA)	323	6,622
Crushed and broken stone industry	10	2	122	555	78	151	469	2,093	477	2,329	823	241	285	(NA)
Crushed stone quarries in manu- factures.....	4	1	469	4,431	469	139	431	997	282	51,279	980	(NA)	438	(NA)
Pacific, total.....	341	48	3,575	21,964	3,203	6,561	19,542	56,803	24,736	75,996	45,495	(NA)	32,726	341,112
Crushed and broken stone industry	298	36	2,668	16,627	2,296	4,747	14,205	38,025	19,984	52,466	28,212	5,543	32,078	324,876
Crushed stone quarries in manu- factures.....	43	12	4,907	45,337	4,907	1,814	5,337	18,778	4,752	523,530	17,283	(NA)	34,648	316,236
Washington, total.....	62	5	389	2,359	338	669	2,110	5,752	2,415	7,623	4,475	(NA)	(NA)	(NA)
Crushed and broken stone industry	52	4	309	1,826	258	509	1,577	4,243	2,070	5,769	2,947	544	385	3,552
Crushed stone quarries in manu- factures.....	10	1	480	4,533	480	160	533	1,509	345	51,854	1,528	(NA)	(NA)	(NA)
Oregon, total.....	74	9	602	3,363	546	1,042	3,037	5,930	4,142	9,263	5,392	(NA)	(NA)	(NA)
Crushed and broken stone industry	66	9	558	3,148	502	952	2,822	5,130	3,994	8,315	4,707	809	301	2,899
Crushed stone quarries in manu- factures.....	8	-	444	4,215	444	90	215	800	148	5948	685	(NA)	(NA)	(NA)
California, total.....	177	30	2,274	14,541	2,033	4,290	12,896	40,253	16,122	52,642	32,916	(NA)	1,598	29,577
Crushed and broken stone industry	156	19	1,516	10,054	1,275	2,774	8,409	24,558	12,033	32,858	18,373	3,733	1,066	14,794
Crushed stone quarries in manu- factures.....	21	11	4,758	44,487	4,758	1,516	4,487	15,695	4,089	519,784	14,543	(NA)	4,532	14,783
Alaska and Hawaii, total.....	28	4	310	1,701	286	560	1,499	4,868	2,057	6,468	2,712	(NA)	(NA)	(NA)
Crushed and broken stone industry	24	4	285	1,599	261	512	1,397	4,094	1,887	5,524	2,185	457	326	3,631
Crushed stone quarries in manu- factures.....	4	-	425	4,102	425	48	102	774	170	5944	527	(NA)	(NA)	(NA)
CRUSHED AND BROKEN LIMESTONE QUARRIES														
United States, total.....	1,882	583	36,063	187,832	31,299	69,301	154,035	520,606	220,867	681,938	460,834	(NA)	336,407	3450,171
Crushed and broken limestone subindustry.....	1,612	491	31,095	160,588	26,331	59,365	126,791	408,450	193,971	542,886	355,812	59,535	31,507	334,803
Crushed limestone quarries in manufactures.....	270	92	44,968	427,244	44,968	9,936	27,244	112,156	26,896	5139,052	105,022	(NA)	44,900	3115,368

TABLE 2. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Industry, geographic area, and type of operation <sup>1</sup>	1963												1958	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of net shipments of primary products <sup>2</sup> (1,000 short tons)	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 short tons)	(\$1,000)	(number)	(\$1,000)
CRUSHED AND BROKEN LIMESTONE QUARRIES—Continued														
Geographic Area—Continued														
Middle Atlantic, total.....	218	87	5,555	32,416	4,654	10,223	25,881	88,589	37,322	116,779	65,009	(NA)	(NA)	(NA)
Crushed and broken limestone subindustry.....	178	68	4,676	27,301	3,775	8,465	20,766	69,502	32,213	92,583	48,521	9,132	5,564	62,010
Crushed limestone quarries in manufactures.....	40	19	4,879	45,115	4,879	1,758	5,115	19,087	5,109	524,196	16,488	(NA)	(NA)	(NA)
New York, total.....	60	27	1,788	11,250	1,508	3,342	9,173	31,480	11,958	40,821	22,199	(NA)	(NA)	(NA)
Crushed and broken limestone subindustry.....	52	23	1,648	10,429	1,368	3,062	8,352	28,319	11,277	36,979	19,035	2,617	1,697	23,892
Crushed limestone quarries in manufactures.....	8	4	4140	4821	4140	280	821	3,161	681	53,842	3,164	(NA)	(NA)	(NA)
New Jersey <sup>6</sup> .....	7	5	279	1,797	205	552	1,182	4,042	1,672	5,267	1,926	447	290	2,014
Pennsylvania <sup>6</sup> .....	119	40	2,749	15,075	2,202	4,851	11,232	37,141	19,264	50,337	27,560	6,068	3,577	36,114
North Central, total.....	924	217	15,701	84,696	13,455	29,559	68,302	217,251	97,646	287,743	201,811	(NA)	(NA)	(NA)
Crushed and broken limestone subindustry.....	846	189	14,170	76,560	11,924	26,497	60,166	183,887	89,598	246,331	168,142	27,154	14,265	161,013
Crushed limestone quarries in manufactures.....	78	28	41,531	48,136	41,531	3,062	8,136	33,364	8,048	541,412	33,669	(NA)	(NA)	(NA)
East North Central <sup>6</sup> .....	443	107	8,747	48,940	7,290	15,897	38,061	121,408	53,667	159,590	113,923	15,485	9,111	106,410
Ohio <sup>6</sup> .....	99	34	2,588	13,482	2,208	4,962	10,888	34,640	16,551	46,140	29,580	5,051	2,931	26,302
Indiana.....	83	28	41,365	46,868	41,143	2,675	5,776	18,284	9,171	524,853	19,062	(NA)	61,045	612,241
Illinois, total.....	163	35	2,721	15,796	2,300	5,082	12,170	42,823	18,123	56,499	38,692	(NA)	(NA)	(NA)
Crushed and broken limestone subindustry.....	150	32	2,477	14,510	2,056	4,594	10,884	38,455	16,778	50,786	34,095	4,447	2,625	41,287
Crushed limestone quarries in manufactures.....	13	3	4244	41,286	4244	488	1,286	4,368	1,345	55,713	4,597	(NA)	(NA)	(NA)
Michigan.....	48	9	41,451	49,288	41,206	2,221	6,888	28,410	6,570	533,379	29,814	(NA)	61,609	618,400
Wisconsin <sup>6</sup> .....	72	8	1,035	5,804	846	1,783	4,637	8,268	5,859	12,343	9,275	1,784	901	8,180
West North Central <sup>6</sup> .....	403	82	5,423	27,620	4,634	10,600	22,105	62,479	35,931	86,741	54,219	11,669	5,154	54,603
Minnesota.....	23	8	354	1,734	282	544	1,179	3,544	1,768	4,823	2,961	489	505	4,053
Missouri <sup>6</sup> .....	163	36	2,427	12,057	2,073	4,557	9,845	26,516	15,448	36,238	21,537	5,726	1,862	18,110
South Dakota.....	6	3	491	4420	470	156	290	891	645	51,439	394	(NA)	(NA)	(NA)
Nebraska <sup>6</sup> .....	24	5	290	1,507	259	631	1,275	2,855	2,728	5,145	2,911	438	(NA)	(NA)
Kansas, total.....	86	12	851	4,108	785	1,776	3,668	11,095	4,955	14,809	810,887	(NA)	(NA)	(NA)
Crushed and broken limestone subindustry.....	77	10	730	3,731	664	1,534	3,291	8,474	4,644	11,877	8,417	1,241	744	8,159
Crushed limestone quarries in manufactures.....	9	2	4121	4377	4121	242	377	2,621	311	52,932	82,470	(NA)	(NA)	(NA)
South Atlantic, total.....	242	102	5,346	25,674	4,737	10,803	21,114	70,703	30,451	94,665	62,382	(NA)	(NA)	(NA)
Crushed and broken limestone subindustry.....	201	88	4,716	22,393	4,107	9,543	17,833	58,578	27,006	79,095	50,087	6,489	4,662	48,604
Crushed limestone quarries in manufactures.....	41	14	4630	43,281	4630	1,260	3,281	12,125	3,445	515,570	12,295	(NA)	(NA)	(NA)
Maryland <sup>6</sup> .....	15	9	425	2,399	375	852	1,784	6,919	2,529	9,025	4,683	423	(NA)	(NA)
Virginia <sup>6</sup> .....	62	32	1,460	5,927	1,269	2,782	4,755	14,688	6,560	19,358	17,917	1,890	1,268	9,933
West Virginia <sup>6</sup> .....	26	9	519	2,551	441	834	2,000	6,191	3,190	8,906	475	644	656	6,566
North Carolina <sup>6</sup> .....	8	4	(9)	(9)	156	334	560	3,414	1,445	4,641	2,746	218	212	2,212
South Carolina <sup>6</sup> .....	4	3	159	552	136	281	429	1,572	405	1,857	690	120	(NA)	(NA)
Georgia <sup>6</sup> .....	10	8	310	1,650	280	820	1,356	4,103	2,485	6,152	2,078	436	193	2,435
Florida, total.....	94	26	91,989	99,999	1,596	3,932	7,634	26,582	11,483	35,138	26,679	(NA)	(NA)	(NA)
Crushed and broken limestone subindustry.....	76	23	91,843	99,314	1,450	3,640	6,949	21,691	10,392	29,156	21,973	2,927	1,675	19,446
Crushed limestone quarries in manufactures.....	18	3	4146	4685	4146	292	685	4,891	1,091	55,982	4,706	(NA)	(NA)	(NA)
East South Central <sup>6</sup> .....	211	90	4,283	18,393	3,732	8,521	15,065	60,134	27,187	77,349	54,608	9,972	3,858	36,584
Kentucky <sup>6</sup> .....	108	47	2,159	9,291	1,872	4,218	7,504	30,142	12,001	37,151	24,138	4,992	1,784	15,286
West South Central, total.....	102	44	2,425	11,669	27,136	4,802	9,668	34,466	14,343	43,857	836,970	(NA)	(NA)	(NA)
Crushed and broken limestone subindustry.....	73	38	2,068	10,012	1,779	4,088	8,011	22,536	12,740	30,324	25,914	4,952	1,901	15,695
Crushed limestone quarries in manufactures.....	29	6	4357	41,657	4357	714	1,657	11,930	1,603	513,533	811,056	(NA)	(NA)	(NA)
Arkansas and Louisiana, total.....	19	6	290	1,170	272	594	1,065	4,801	1,614	6,011	84,378	(NA)	(NA)	(NA)
Crushed and broken limestone subindustry.....	15	6	253	964	235	519	859	2,761	1,343	3,700	2,702	404	159	1,281
Crushed limestone quarries in manufactures.....	4	-	437	4206	437	75	206	2,020	271	52,291	81,676	(NA)	(NA)	(NA)
Oklahoma, total.....	28	13	678	3,374	558	1,267	2,700	9,009	3,303	11,367	10,507	(NA)	(NA)	(NA)
Crushed and broken limestone subindustry.....	23	12	616	3,189	536	1,203	2,525	7,339	3,018	9,412	8,784	945	757	4,923

**TABLE 2. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Industry, geographic area, and type of operation <sup>1</sup>	1963												1958	
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of sup- plies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of net shipments of primary products <sup>2</sup>	Capital expendi- tures	All em- ployees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 short tons)	(\$1,000)	(number)	(\$1,000)
CRUSHED AND BROKEN LIMESTONE QUARRIES—Continued														
Geographic Area—Continued														
Mountain <sup>6</sup> .....	33	4	327	1,519	268	545	1,360	4,339	1,496	5,261	2,189	574	483	4,612
Colorado <sup>6</sup> .....	11	1	99	427	93	186	385	1,115	416	1,465	781	66	(NA)	(NA)
Utah, total.....	9	3	173	937	132	265	854	2,975	715	3,454	1,719	(NA)	(NA)	(NA)
Crushed and broken limestone subindustry.....	5	2	104	506	63	126	423	1,978	433	2,175	739	236	97	1,298
Crushed limestone quarries in manufactures.....	4	1	469	4431	469	139	431	997	282	51,279	980	(NA)	(NA)	(NA)
Pacific, total.....	83	19	1,376	7,810	1,308	2,744	7,365	24,074	6,184	29,499	20,290	(NA)	(NA)	(NA)
Crushed and broken limestone subindustry.....	54	8	572	3,013	504	1,136	2,568	6,560	2,309	8,110	4,494	759	550	4,883
Crushed limestone quarries in manufactures.....	29	11	4804	44,797	4804	1,608	4,797	17,514	3,875	521,389	15,796	(NA)	(NA)	(NA)
Washington.....	19	2	130	774	121	265	726	1,847	676	2,359	1,685	(NA)	(NA)	(NA)
Oregon.....	11	3	95	445	87	192	407	1,092	418	1,406	1,049	(NA)	(NA)	(NA)
California.....	45	14	41,122	46,467	41,072	2,229	6,111	20,239	4,884	524,650	16,951	(NA)	6260	62,523
Type of Operation for Crushed and Broken Limestone Subindustry														
Producing establishments, total.....	1,586	490	1030,243	10153,345	26,242	59,207	126,497	408,642	193,455	542,886	355,812	59,211	1030,701	334,991
Open quarries:														
Quarries only.....	57	10	486	2,347	441	928	2,046	7,837	3,827	10,628	8,197	1,036	746	8,355
Quarries with preparation plants:														
Crushing.....	1,376	418	26,287	133,386	22,732	51,562	110,113	360,562	161,808	470,654	318,926	51,716	26,667	293,479
Screening but no crushing.....	26	4	359	1,639	341	760	1,505	4,261	4,038	7,075	4,578	1,224	153	1,258
Other preparation methods only.....	31	-	28	140	26	55	132	153	108	230	334	31	291	2,930
Combination open and underground quarries with crushing plants...	15	14	737	3,345	660	1,428	2,755	7,191	3,713	9,717	4,400	1,187	664	6,625
Underground quarries with crushing plants.....	56	36	1,755	8,846	1,558	3,334	7,292	20,292	8,214	26,246	14,673	2,260	111,931	117,716
Separately operated preparation plants:														
Crushing and screening only.....	11	3	189	979	146	271	674	2,428	3,958	6,134	2,477	252	249	4,628
All other preparation methods....	14	5	402	2,663	338	869	1,980	5,918	7,789	12,202	2,227	1,505		
Nonproducing establishments.....	26	1	10107	10369	89	158	294	(12)	516	-	-	324	1025	(12)
CRUSHED AND BROKEN GRANITE QUARRIES														
United States, total.....	154	65	4,082	19,916	3,471	7,938	16,100	62,020	35,378	90,213	48,897	(NA)	3133,309	3133,493
Crushed and broken granite subindustry.....	150	65	4,060	19,826	3,449	7,894	16,010	61,702	35,232	89,749	48,672	7,185	33,309	333,493
Crushed granite quarries in manufactures.....	4	-	422	490	422	44	90	318	146	5464	225	(NA)	(13)	(13)
Geographic Area														
New England <sup>6</sup> .....	5	3	160	876	101	229	595	1,340	568	1,827	937	81	167	2,359
Middle Atlantic.....	9	2	147	683	134	258	591	1,630	751	2,225	1,202	156		
New Jersey.....	4	2	87	397	82	155	359	1,270	495	1,732	866	33	(NA)	(NA)
North Central.....	7	2	68	372	60	139	327	767	747	1,362	1,168	152	149	862
West North Central.....	4	2	62	356	57	133	315	737	719	1,311	970	145	59	380
South <sup>6</sup> .....	80	52	3,204	14,781	2,765	6,452	12,055	48,496	29,169	72,411	39,418	5,254	2,641	24,914
Virginia.....	16	10	468	2,201	407	963	1,829	7,211	3,629	10,167	6,504	673	378	3,394
South Carolina.....	14	10	569	2,182	503	1,121	1,872	7,702	3,486	10,282	7,054	906	(NA)	(NA)
Georgia.....	18	15	1,012	4,731	909	2,234	4,000	12,652	9,940	20,265	13,788	2,327	778	9,009
Mountain.....	5	2	80	417	77	155	394	697	335	1,008	618	24	38	222
Pacific <sup>6</sup> .....	44	4	401	2,697	312	661	2,048	8,772	3,662	10,916	5,329	1,518	3314	35,136
Type of Operation for Crushed and Broken Granite Subindustry														
Producing establishments, total.....	150	65	4,060	19,826	3,449	7,894	16,010	61,702	35,232	89,749	48,672	7,185	33,309	333,493
Quarries only.....	10	2	121	694	108	214	628	2,347	638	2,648	1,340	337	(NA)	(NA)
Quarries with preparation plants...	140	63	3,939	19,132	3,341	7,680	15,382	59,355	34,594	87,101	47,332	6,848	(NA)	(NA)
Open quarries with crushing only.....	38	6	281	1,322	250	525	1,150	4,235	1,147	4,776	3,006	606	(NA)	(NA)
CRUSHED AND BROKEN STONE, N.E.C., QUARRIES														
United States, total.....	550	119	8,975	52,781	7,300	15,363	39,122	122,927	70,680	177,640	76,521	(NA)	136,995	1382,402
Crushed and broken stone, n.e.c., subindustry.....	494	112	8,081	48,701	6,406	13,575	35,042	111,503	66,689	162,225	68,449	15,967	6,914	81,123
Crushed stone, n.e.c., quarries in manufactures.....	56	7	4894	44,080	4894	1,788	4,080	11,424	3,991	515,415	8,072	(NA)	41381	131,279

See footnotes at end of table.

**TABLE 2. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of sup- plies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of net shipments of primary products <sup>2</sup>  (1,000 short tons)	Capital expendi- tures  (\$1,000)	All em- ployees	Value added in mining  (\$1,000)
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)							
CRUSHED AND BROKEN STONE, N.E.C., QUARRIES—Continued														
<u>Geographic Area</u>														
New England <sup>6</sup> .....	19	7	437	3,187	353	796	2,401	6,657	2,977	8,824	5,234	810	142,700	1434,517
Massachusetts <sup>6</sup> .....	8	4	230	1,420	199	423	1,148	3,297	1,257	4,121	2,194	433	272	3,267
Connecticut <sup>6</sup> .....	7	3	192	1,728	140	349	1,216	3,229	1,626	4,538	2,979	317	338	3,523
Middle Atlantic, total.....	104	37	2,861	19,613	2,119	4,848	12,625	41,267	21,941	57,714	22,422	(NA)	(NA)	(NA)
Crushed and broken stone, n.e.c., subindustry.....	89	35	2,579	18,203	1,837	4,285	11,215	38,413	21,219	54,138	20,610	5,494	(14)	(14)
Crushed stone, n.e.c., quarries in manufactures.....	15	2	4282	41,410	4282	563	1,410	2,854	722	53,576	1,812	(NA)	(NA)	(NA)
New Jersey <sup>6</sup> .....	19	16	1,156	9,125	757	1,923	5,196	19,872	11,359	27,637	9,341	3,594	(NA)	(NA)
North Central, total.....	51	6	825	4,615	564	1,090	2,584	11,310	8,162	17,922	3,680	(NA)	(NA)	(NA)
Crushed and broken stone, n.e.c., subindustry.....	41	5	758	4,340	497	956	2,309	10,331	7,870	16,651	2,579	1,550	1,114	9,800
Crushed stone, n.e.c., quarries in manufactures.....	10	1	467	4275	467	134	275	979	292	51,271	1,101	(NA)	(NA)	(NA)
East North Central <sup>6</sup> .....	20	3	552	3,268	358	691	1,736	8,981	6,864	14,598	1,789	1,247	865	7,357
Ohio <sup>6</sup> .....	6	-	90	600	37	71	146	938	219	1,035	230	122	554	4,021
West North Central <sup>6</sup> .....	21	2	206	1,072	139	265	573	1,350	1,006	2,053	790	303	249	2,443
Kansas.....	7	1	67	290	61	122	257	543	515	929	443	129	52	403
South <sup>6</sup> .....	101	39	2,373	10,935	2,027	4,219	8,541	30,604	19,009	45,153	19,793	4,460	1,533	16,412
Maryland.....	12	6	420	42,032	4324	670	1,139	5,160	4,743	59,185	4,850	718	153	1,190
Virginia <sup>6</sup> .....	17	8	398	2,014	328	788	1,455	6,910	2,820	9,152	3,580	578	193	2,199
West Virginia <sup>6</sup> .....	11	-	74	444	55	127	374	839	430	1,194	486	75	(NA)	(NA)
Georgia.....	9	7	467	1,958	413	671	1,678	6,411	3,293	9,161	2,067	543	453	6,454
Oklahoma.....	9	2	120	482	113	263	450	1,316	1,029	2,157	2,179	188	(NA)	(NA)
Texas.....	9	4	166	596	154	376	561	1,397	967	2,127	1,103	237	(NA)	(NA)
Mountain <sup>6</sup> .....	44	2	239	1,119	212	369	987	2,805	1,601	4,019	1,975	387	353	5,537
Montana.....	5	-	33	173	24	38	126	384	211	515	420	80	(NA)	(NA)
Idaho.....	8	-	33	147	30	54	145	239	332	507	338	64	(NA)	(NA)
Arizona <sup>6</sup> .....	14	1	78	398	71	115	350	1,052	427	1,303	524	176	(NA)	(NA)
Pacific <sup>6</sup> .....	200	24	1,695	10,917	1,480	2,950	9,589	22,693	14,013	33,440	18,258	3,266	1,214	14,857
Washington <sup>6</sup> .....	37	3	227	1,419	192	354	1,221	3,444	1,657	4,725	2,444	376	228	1,882
Oregon <sup>6</sup> .....	58	5	448	2,605	400	734	2,317	3,989	3,636	7,095	3,859	530	204	1,904
California <sup>6</sup> .....	86	12	742	5,326	633	1,365	4,683	11,312	6,879	16,270	9,931	1,921	555	7,875
Hawaii.....	19	4	278	1,567	255	497	1,368	3,958	1,831	5,350	2,024	439	227	3,196
<u>Type of Operation for Crushed and Broken Stone, N.E.C., Subindustry</u>														
Producing establishments, total.....	488	110	107,427	1043,160	6,370	13,510	34,930	111,664	66,496	162,225	68,449	15,935	106,664	81,157
Open quarries:														
Quarries only.....	60	6	374	1,579	348	649	1,440	4,575	3,358	7,430	3,973	503	15277	152,565
Quarries with preparation plants:														
Crushing.....	388	93	6,313	37,862	5,370	11,512	30,278	95,767	56,222	137,827	59,854	14,162	165,097	1666,619
Screening, but no crushing.....	7	-	58	274	56	120	261	1,583	380	1,679	1,555	284	642	3,520
Other preparation methods only.....	4	1	29	24	41	33	249	5,715	2,787	501	153	78		
Underground and combination.....	8	388	388	1,650	303	668	1,436			7,451	1,211	472	386	4,983
Separately operated preparation plants:														
Crushing only.....	8	2	79	481	69	138	408	1,044	932	1,824	220	152	35	274
Other preparation methods.....	13	3	215	1,065	183	390	858	2,980	2,817	5,513	1,483	284		

Note: For explanation of column captions see appendix A.

Standard Notes: - Represents zero. (D) Withheld to avoid approximately disclosing data for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>General statistics for some States are not shown separately in this table in order to avoid disclosing figures for individual companies or because of the relatively small size of the statistics. Such States are shown below for 1963, with the number of establishments in each State (and in parentheses the number of employees or employment-size range):

SIC 1411, Dimension Stone (quarries only): New Hampshire, 1 (10-19); Vermont, 9 (348); Massachusetts, 4 (21); Connecticut, 7 (5-9); Ohio, 8 (33); Illinois, 7 (23); Michigan, 4 (21); Missouri, 7 (60); Nebraska, 2 (5-9); Kansas, 4 (0-4); Maryland, 3 (25); Virginia, 3 (20-49); West Virginia, 1 (0-4); North Carolina, 6 (59); South Carolina, 2 (5-9); Florida, 2 (10-19); Kentucky, 4 (7); Tennessee, 22 (235); Arkansas, 9 (65); Oklahoma, 9 (35); Montana, 1 (0-4); Idaho, 1 (0-4); Colorado, 12 (50); Arizona, 3 (36); Utah, 2 (5-9); Nevada, 2 (0-4); Washington, 9 (14); Oregon, 3 (8); Hawaii, 3 (16).

Dimension stone quarries with dressing plants (included in manufactures): Maine, 5 (222); New Hampshire, 1 (100-249); Vermont, 13 (1,211); Massachusetts, 9 (368); Rhode Island, 1 (0-4); Connecticut, 2 (0-4); Ohio, 6 (536); Illinois, 1 (20-49); Michigan, 4 (10-19); Iowa, 1 (10-19); Missouri, 6 (497); South Dakota, 2 (100-249); Nebraska, 1 (0-4); Kansas, 5 (37); Maryland, 1 (20-49); Virginia, 5 (100-249); North Carolina, 5 (343); South Carolina, 1 (10-19); Kentucky, 2 (0-4); Tennessee, 6 (522); Alabama, 3 (100-249); Arkansas, 3 (30); Oklahoma, 4 (14); Colorado, 5 (11); New Mexico, 2 (20-49); Arizona, 6 (38); Utah, 2 (10-19); Nevada, 1 (0-4); Washington, 6 (41).

SIC 1421, Crushed and Broken Stone: Maine, 2 (20-49); New Hampshire, 2 (10-19); Rhode Island, 3 (64); North Dakota, 1 (0-4); South Dakota, 6 (100-249); Delaware, 1 (0-4); Maryland, 27 (500-999); Arkansas, 23 (500-999); Louisiana, 1 (10-19); Idaho, 11 (39); Nevada, 4 (8); Hawaii, 24 (285).

Crushed stone quarries in manufactures: Maine, 5 (50-99); New Hampshire, 1 (0-4); Wisconsin, 4 (13); Iowa, 5 (96); North Dakota, 1 (5-9); South Dakota, 3 (29); Nebraska, 2 (50-99); West Virginia, 4 (70); North Carolina, 3 (20); South Carolina, 2 (50-99); Georgia, 2 (20-49); Kentucky, 3 (20-49); Mississippi, 2 (20-49); Arkansas, 3 (20-49); Louisiana, 1 (10-19); Montana, 3 (14); Idaho, 1 (0-4); Wyoming, 1 (10-19); Colorado, 3 (50-99); Nevada, 4 (41); Alaska, 1 (0-4); Hawaii, 3 (20-49).

Footnotes continued on next page.



TABLE 2. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Footnotes for Table 2-14B—Continued

<sup>2</sup>Represents the product indicated by the name of the industry or subindustry. (Industry totals for all stone therefore exceed the sum of the totals for the subindustries.) Net shipments represents gross shipments less stone received for dressing or crushing. For crushed or broken stone quarries in manufactures, represents gross shipments of stone plus production of stone for use in the same establishment in the manufacture of cement, lime, or other manufactured products.

<sup>3</sup>For the crushed and broken granite subindustry, excludes data for one establishment in Alaska with less than 5 employees and, for crushed limestone quarries in manufactures, excludes data for one quarry in Hawaii with 5 to 9 employees.

<sup>4</sup>For quarries in manufactures, number of production, development, and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations, hence, the same figures are shown for these operations for production, development, and exploration workers and for all employees.

<sup>5</sup>Includes the estimated value of stone produced and used in the same establishment in making cement, lime, ready-mixed concrete, and other manufactured products.

<sup>6</sup>Excludes data for crushed stone quarries in manufactures.

<sup>7</sup>Includes data for Mississippi, in which two establishments were operated in the crushed and broken stone industry, with a total of less than 5 employees, and one crushed stone quarry in manufactures, with 10 to 19 employees.

<sup>8</sup>Includes crushed and broken stone, n.e.c., produced as a secondary product in this subindustry.

<sup>9</sup>Figures for North Carolina are included with those for Florida.

<sup>10</sup>Excludes data for separately reported central offices and related facilities. These were not distributed by type of operation.

<sup>11</sup>Includes data for 3 underground quarries without preparation plants.

<sup>12</sup>Not shown since the cost of supplies, purchased fuels and electric energy, contract work, and purchased machinery installed exceeded capital expenditures.

<sup>13</sup>Data for one granite quarry in manufactures are included with those for stone, n.e.c., quarries in manufactures.

<sup>14</sup>Data for Middle Atlantic are included with those for New England.

<sup>15</sup>Excludes data for 2 quarries in Hawaii.

<sup>16</sup>Excludes data for 5 quarries in Hawaii.



TABLE 3A. Detailed Statistics, by Geographic Areas: 1963

Item	1411.-Dimension stone industry				1421.-Crushed and broken stone industry			
	Industry total	Dimension limestone subindustry	Dimension granite subindustry	Dimension stone, n.e.c., subindustry	United States			
					Industry total	Crushed and broken limestone subindustry	Crushed and broken granite subindustry	Crushed and broken stone, n.e.c., subindustry
Establishments, total.....number..	319	61	66	192	2,256	1,612	150	494
With 0 to 19 employees.....do....	294	56	56	182	1,588	1,121	85	382
With 20 to 99 employees.....do....	24	5	9	10	624	464	60	100
With 100 employees and over.....do....	1	-	1	-	44	27	5	12
Including quarries.....do....	319	61	66	192	2,210	1,587	150	473
Including preparation plants.....do....	12	3	1	8	2,097	1,529	140	428
Net shipments of primary products <sup>1</sup> ...1,000 short tons..	1,330	369	504	457	474,413	359,812	48,672	68,449
Value of shipments and receipts.....\$1,000..	19,735	3,513	9,428	6,794	794,860	542,886	89,749	162,225
Stone transferred to other establishments for preparation and resales.....do....	536	245	233	58	19,141	14,886	187	4,068
Net shipments and receipts, total.....do....	19,199	3,268	9,195	6,736	775,719	528,000	89,562	158,157
Primary products.....do....	18,525	3,266	8,779	6,475	739,193	503,289	85,140	149,203
Other products and services.....do....	674	2	416	261	36,526	24,711	4,422	8,954
Value added in mining.....do....	14,842	2,947	6,513	5,382	581,655	408,450	61,702	111,503
Persons in industry, total.....number..	2,338	366	844	1,128	44,265	31,853	4,103	8,309
Production, development, and exploration workers, average for year.....do....	1,970	286	773	911	36,186	26,331	3,449	6,406
March.....do....	1,747	197	730	820	32,142	23,051	3,439	5,652
May.....do....	2,020	301	790	929	37,312	27,164	3,566	6,582
August.....do....	2,144	364	835	945	39,023	28,296	3,544	7,183
November.....do....	1,930	275	746	909	36,279	26,559	3,244	6,476
Other employees.....do....	186	40	51	95	7,050	4,764	611	1,675
Proprietors and firm members.....do....	182	40	20	122	1,029	758	43	228
Performing manual labor.....do....	166	37	18	111	693	499	41	153
Man-hours worked by production, development, and exploration workers, total.....1,000..	3,820	568	1,645	1,607	80,834	59,365	7,894	13,575
At mines and quarries, total.....do....	3,599	508	1,585	1,506	50,602	38,322	5,137	7,143
Underground.....do....	63	1	7	55	2,686	2,253	121	312
Open quarries.....do....	2,981	484	1,404	1,093	38,420	29,270	3,589	5,561
Surface (including mine shops and yards).....do....	555	23	174	358	9,496	6,799	1,427	1,270
At preparation plants.....do....	221	60	60	101	30,232	21,043	2,757	6,432
Man-hours spent on development and exploration work (included above).....do....	38	1	31	6	1,239	1,087	43	109
Principal expenses designated below, total.....\$1,000..	13,089	1,976	6,628	4,485	465,000	313,915	48,572	102,513
Wages of production, development, and exploration workers.....do....	6,986	1,108	3,271	2,607	177,843	126,791	16,010	35,042
Salaries of all other employees.....do....	858	158	330	370	51,272	33,797	3,816	13,659
Supplies and purchases for resale.....do....	3,519	390	2,297	832	157,345	96,967	22,734	37,644
Stone received for preparation.....do....	214	214	-	-	9,051	7,061	87	1,903
Purchased fuel.....do....	644	77	328	239	26,083	18,960	1,867	5,256
Purchased electric energy.....do....	438	68	221	149	19,807	13,930	1,883	3,994
Contract work.....do....	630	161	181	288	23,599	16,409	2,175	5,015
Purchased machinery installed.....do....	762	138	273	351	60,007	40,644	6,486	12,877
Capital expenditures, total.....do....	1,114	282	385	447	82,687	59,535	7,185	15,967
Development and exploration of mineral property.....do....	33	4	23	6	1,402	1,034	146	222
Preparation plant and other construction.....do....	295	15	123	157	18,741	11,829	1,782	5,130
New machinery and equipment.....do....	531	142	186	203	50,813	37,213	4,425	9,175
Used plant and equipment.....do....	255	121	53	81	11,731	9,459	832	1,440
Energy used.....million kwh. equivalent..	276	23	185	68	9,951	6,484	812	2,655
Coal.....1,000 short tons..	1	(2)	(2)	(2)	141	26	6	109
Distillate fuel oil.....1,000 barrels..	24	3	11	10	1,677	1,284	155	238
Residual fuel oil.....do....	18	1	17	(2)	518	308	32	178
Gas.....million cu. ft..	250	(2)	250	-	3,402	1,514	630	1,258
Gasoline.....1,000 gallons..	749	63	528	158	30,817	24,587	2,171	4,059
Other fuels.....\$1,000..	137	24	53	60	1,821	1,238	96	487
Undistributed.....do....	124	18	27	79	4,703	3,922	46	735
Electric energy purchased.....million kwh..	27	4	14	9	1,298	910	135	253
Electric energy generated and used.....do....	-	-	-	-	49	36	-	13
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	79	18	28	33	4,269	3,219	362	688
Per production worker.....hp..	40	63	36	36	118	122	105	107
Prime movers.....1,000 hp..	56	13	18	25	2,907	2,237	237	433
Electric motors driven by purchased energy.....do....	23	5	10	8	1,362	982	125	255
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	(2)	(2)	(2)	-	42	38	-	4

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Geographic Areas: 1963—Continued

Item	1421—Crushed and broken stone industry—Continued								
	New England				Middle Atlantic				
	Division		Massachusetts	Connecticut	Division, total			New York	
	Industry total	Crushed and broken stone, n.e.c., subindustry			Industry total	Crushed and broken limestone subindustry	Crushed and broken stone, n.e.c., subindustry	Industry total	Crushed and broken limestone subindustry
Establishments, total.....number..	40	19	13	13	276	178	89	67	52
With 0 to 19 employees.....do....	24	12	6	8	171	110	54	39	29
With 20 to 99 employees.....do....	16	7	7	5	95	63	30	25	21
With 100 employees and over.....do....	-	-	-	-	10	5	5	3	2
Including quarries.....do....	39	19	12	13	268	173	86	64	49
Including preparation plants.....do....	35	15	10	13	264	173	84	65	51
Net shipments of primary products <sup>1</sup> ...1,000 short tons..	8,042	5,234	3,000	3,613	70,686	48,521	20,610	22,906	19,035
Value of shipments and receipts.....\$1,000..	14,484	8,824	5,960	5,701	148,946	92,583	54,138	47,109	36,079
Stone transferred to other establishments									
for preparation and resales.....do....	219			34	3,704	2,649	1,055	634	
Net shipments and receipts, total.....do....	14,265	8,824	5,960	5,667	145,242	89,934	53,083	46,475	36,979
Primary products.....do....	13,898	8,514	5,518	5,667	137,229	84,795	49,746	43,012	33,744
Other products and services.....do....	367	(D)	(D)	-	8,013	5,139	3,337	3,463	(D)
Value added in mining.....do....	10,911	6,657	4,575	4,073	109,545	69,502	38,413	35,958	28,319
Persons in industry, total.....number..	884	440	393	271	7,491	4,721	2,622	2,136	1,656
Production, development, and exploration									
workers, average for year.....do....	696	353	307	207	5,746	3,775	1,837	1,688	1,368
March.....do....	520	275	230	157	4,645	3,090	1,456	1,159	974
May.....do....	739	374	328	218	6,085	3,909	1,941	1,882	1,518
August.....do....	780	385	352	226	6,327	4,148	2,025	1,966	1,577
November.....do....	731	371	312	226	5,872	3,814	1,910	1,732	1,388
Other employees.....do....	184	84	86	64	1,656	901	742	488	280
Proprietors and firm members.....do....	4	3	-	-	89	45	43	10	8
Performing manual labor.....do....	4	3	-	-	52	31	20	6	4
Man-hours worked by production, development,									
and exploration workers, total.....1,000..	1,595	796	662	515	13,008	8,465	4,285	3,811	3,062
At mines and quarries, total.....do....	989	444	422	264	8,044	5,537	2,359	2,746	2,238
Underground.....do....	-	-	-	-	141	26	103	-	-
Open quarries.....do....	835	349	310	247	6,335	4,431	1,774	2,149	1,734
Surface (including mine shops and yards).....do....	154	95	112	17	1,568	1,080	482	597	504
At preparation plants.....do....	606	352	240	251	4,964	2,928	1,926	1,065	924
Man-hours spent on development and exploration									
work (included above).....do....	34	3	34	-	92	20	40	1	1
Principal expenses designated below, total.....\$1,000..	9,431	5,529	3,566	3,958	90,253	53,448	35,509	26,593	19,654
Wages of production, development, and									
exploration workers.....do....	4,018	2,401	1,730	1,545	32,572	20,766	11,215	10,799	8,392
Salaries of all other employees.....do....	1,442	786	528	590	13,615	6,535	6,988	4,033	2,077
Supplies and purchases for resale.....do....	2,650	1,521	788	1,276	31,568	19,527	13,497	8,124	7,133
Stone received for preparation.....do....						2,078		567	
Purchased fuel.....do....	475	223	103	236	3,982	2,399	1,532	1,137	750
Purchased electric energy.....do....	531	343	252	195	4,604	2,888	1,631	1,507	934
Contract work.....do....	315	255	165	116	3,912	3,255	646	426	408
Purchased machinery installed.....do....	996	635	624	236	10,117	6,066	3,913	2,745	2,052
Capital expenditures, total.....do....	1,394	810	547	431	14,782	9,132	5,494	3,355	2,617
Development and exploration of									
mineral property.....do....	11	3	6	2	162	75	42	55	11
Preparation plant and other construction.....do....	189	134	102	46	4,406	1,673	2,721	567	555
New machinery and equipment.....do....	1,060	597	364	365	8,175	5,482	2,604	2,603	1,936
Used plant and equipment.....do....	134	76	75	18	2,039	1,902	127	130	115
Energy used.....million kwh. equivalent..	157	88	54	69	1,646	905	715	599	301
Coal.....do....1,000 short tons..	-	-	-	-	40	11	29	31	2
Distillate fuel oil.....do....1,000 barrels..	21	10	8	12	264	159	101	73	65
Residual fuel oil.....do....	13	13	12	1	61	42	16	17	17
Gas.....do....million cu. ft..	17	16	-	17	202	10	192	10	8
Gasoline.....do....1,000 gallons..	528	219	80	225	4,665	3,109	1,370	895	777
Other fuels.....do....\$1,000..	81	64	15	51	250	104	146	78	38
Undistributed.....do....	104	8	-	47	759	585	174	187	176
Electric energy purchased.....million kwh..	28	17	12	9	298	188	103	105	61
Electric energy generated and used.....do....	-	-	-	-	(2)	(2)	(2)	(2)	(2)
Horsepower rating of power equipment (prime									
movers and electric motors driven by									
purchased energy), total.....1,000 hp..	80	42	30	32	723	525	182	199	163
Per production worker.....do....hp..	115	119	98	155	126	139	99	118	119
Prime movers.....do....1,000 hp..	52	25	17	22	439	328	101	127	107
Electric motors driven by purchased energy.....do....	28	17	13	10	284	197	81	72	56
Horsepower rating of electric motors driven									
by energy generated at the establishment.....do....	-	-	-	-	4	4	-	3	3

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Geographic Areas: 1963—Continued

Item	1421.—Crushed and broken stone industry—Continued																			
	Middle Atlantic—Continued					East North Central														
	New Jersey			Pennsylvania		Division, total			Ohio											
	Industry total	Crushed and broken limestone subindustry	Crushed and broken stone, n.e.c. subindustry	Industry total	Crushed and broken limestone subindustry	Industry total	Crushed and broken limestone subindustry	Crushed and broken stone, n.e.c. subindustry	Industry total	Crushed and broken limestone subindustry										
Establishments, total.....number..	30	7	19	179	119	466	443	20	105	99										
With 0 to 19 employees.....do....	7	2	3	125	79	356	336	17	71	65										
With 20 to 99 employees.....do....	20	5	13	50	37	96	95	1	30	30										
With 100 employees and over.....do....	3	-	3	4	3	14	12	2	4	4										
Including quarries.....do....	28	7	17	176	117	459	436	20	102	96										
Including preparation plants.....do....	29	7	19	170	115	445	428	15	97	93										
Net shipments of primary products <sup>1</sup> ...1,000 short tons..	12,133	1,926	9,341	35,647	27,560	116,245	113,923	1,789	29,810	329,580										
Value of shipments and receipts.....\$1,000..	34,636	5,267	27,637	67,201	50,337	174,239	159,590	14,598	47,175	46,140										
Stone transferred to other establishments for preparation and resales.....do....	797	5,267	27,637	2,273	2,100	4,815	4,538	14,598	1,805	1,805										
Net shipments and receipts, total.....do....	33,839																			
Primary products.....do....	32,203																			
Other products and services.....do....	1,636																			
Value added in mining.....do....	25,184	4,042	19,872	48,403	37,141	130,419	121,408	8,981	35,578	34,640										
Persons in industry, total.....number..	1,524	280	1,157	3,781	2,785	9,554	8,990	556	2,706	2,616										
Production, development, and exploration workers, average for year.....do....	1,044	205	757	3,014	2,202	7,651	7,290	358	2,245	2,208										
March.....do....	868	194	617	2,622	1,922	6,458	6,132	320	1,951	1,916										
May.....do....	1,093	205	795	3,110	2,272	8,004	7,618	384	2,303	2,265										
August.....do....	1,137	213	831	3,224	2,358	8,304	7,916	386	2,319	2,284										
November.....do....	1,076	203	776	3,064	2,223	7,784	7,438	344	2,278	2,238										
Other employees.....do....	478	74	399	690	547	1,654	1,457	194	433	380										
Proprietors and firm members.....do....	2	1	1	77	36	249	243	4	28	28										
Performing manual labor.....do....	-	-	-	46	27	201	195	4	24	24										
Man-hours worked by production, development, and exploration workers, total.....1,000..	2,630	552	1,923	6,567	4,851	16,594	15,897	691	5,033	4,962										
At mines and quarries, total.....do....	1,160	200	887	4,138	3,099	10,860	10,676	180	3,527	3,485										
Underground.....do....	-	-	-	141	26	560	557	3	243	243										
Open quarries.....do....	1,002	181	748	3,184	2,516	7,901	7,735	162	2,632	2,590										
Surface (including mine shops and yards).....do....	158	19	139	813	557	2,399	2,384	15	652	652										
At preparation plants.....do....	1,470	352	1,036	2,429	1,752	5,734	5,221	511	1,506	1,477										
Man-hours spent on development and exploration work (included above).....do....	38	-	38	53	19	121	97	24	22	22										
Principal expenses designated below, total....\$1,000..	22,602	3,416	18,294	41,058	30,378	99,673	90,457	9,182	27,533	26,815										
Wages of production, development, and exploration workers.....do....	6,737	1,182	5,196	15,036	11,232	39,809	38,061	1,736	11,034	10,888										
Salaries of all other employees.....do....	4,582	615	3,929	5,000	3,843	12,415	10,879	1,536	3,048	2,594										
Supplies and purchases for resale.....do....	9,590	1,212	7,974	11,589	7,664	32,524	27,379	5,131	9,475	9,397										
Stone received for preparation.....do....											1,698	660	660	335	335					
Purchased fuel.....do....											693	188	476	2,152	1,461	5,628	5,212	414	1,545	1,523
Purchased electric energy.....do....											795	183	550	2,302	1,771	4,616	4,310	304	1,323	1,306
Contract work.....do....	205	36	169	3,281	2,811	4,021	3,956	65	773	772										
Purchased machinery installed.....do....	2,243	53	2,190	5,129	3,961	13,110	12,150	950	3,319	3,218										
Capital expenditures, total.....do....	4,074	447	3,594	7,353	6,068	16,739	15,485	1,247	5,173	5,051										
Development and exploration of mineral property.....do....	13	10	2	94	54	247	210	37	55	54										
Preparation plant and other construction.....do....	2,441	38	2,397	1,398	1,080	3,995	3,552	441	727	684										
New machinery and equipment.....do....	1,522	326	1,172	4,050	3,220	10,426	9,770	651	3,628	3,566										
Used plant and equipment.....do....	98	73	23	1,811	1,714	2,071	1,953	118	763	747										
Energy used.....million kwh. equivalent..	306	99	184	741	505	1,872	1,699	119	571	560										
Coal.....1,000 short tons..	8	8	-	1	1	9	9	-	3	3										
Distillate fuel oil.....1,000 barrels..	67	2	62	124	92	405	373	32	92	92										
Residual fuel oil.....do....	4	-	1	40	25	74	54	20	9	4										
Gas.....million cu. ft..	4	-	4	188	2	327	327	-	177	177										
Gasoline.....1,000 gallons..	681	200	333	3,089	2,132	6,937	6,863	74	2,156	2,143										
Other fuels.....\$1,000..	114	30	84	58	36	150	139	11	11	10										
Undistributed.....do....	77	32	45	495	377	1,216	1,206	8	619	618										
Electric energy purchased.....million kwh..	50	12	32	143	115	290	270	20	88	87										
Electric energy generated and used.....do....	-	-	-	(2)	(2)	9	9	(2)	1	1										
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	85	16	60	439	346	943	910	33	240	237										
Per production worker.....hp..	81	78	79	146	157	123	125	92	107	107										
Prime movers.....1,000 hp..	44	8	30	268	213	622	603	19	146	144										
Electric motors driven by purchased energy.....do....	41	8	30	171	133	321	307	14	94	93										
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	1	1	1	1	1	1	1	(2)	2	2										

TABLE 3A. Detailed Statistics, by Geographic Areas: 1963—Continued

Item	1421.—Crushed and broken stone industry—Continued											
	East North Central—Continued					West North Central						
	Indiana	Illinois	Michigan	Wisconsin		Division		Minnesota	Iowa	Missouri		
				Industry total	Crushed and broken limestone subindustry	Industry total	Crushed and broken limestone subindustry			Industry total	Crushed and broken limestone subindustry	
Establishments, total.....number..	82	150	44	85	72	428	403	27	115	171	163	
With 0 to 19 employees.....do....	55	118	38	74	64	342	321	18	94	135	127	
With 20 to 99 employees.....do....	27	30	2	7	6	84	80	9	21	34	34	
With 100 employees and over.....do....	-	2	4	4	2	2	2	-	-	2	2	
Including quarries.....do....	80	148	44	85	72	424	401	27	114	168	162	
Including preparation plants.....do....	82	146	43	77	68	392	372	27	109	158	152	
Net shipments of primary products <sup>1</sup> ...1,000 short tons..	16,244	34,095	24,978	11,118	9,275	56,397	54,219	4,013	18,212	21,794	21,537	
Value of shipments and receipts.....\$1,000..	22,781	50,786	27,558	25,939	12,343	90,105	86,741	5,987	27,701	36,817	36,238	
Stone transferred to other establishments for preparation and resales.....do....	371	1,409	27,558	25,939	{ 299 12,044	{ 2,642 87,463	{ 2,545 84,196	5,987	{ 1,454 26,247	646	36,238	
Net shipments and receipts, total.....do....	22,410	49,377										21,704
Primary products.....do....	21,704	47,392	(D)	(D)	1,880	5,737	5,966	(D)	1,313	3,803	(D)	
Other products and services.....do....	706	1,985										
Value added in mining.....do....	16,969	38,455	23,336	16,081	8,268	64,566	62,479	4,174	20,543	27,081	26,516	
Persons in industry, total.....number..	1,409	2,568	1,398	1,472	1,087	5,987	5,704	420	1,633	2,597	2,537	
Production, development, and exploration workers, average for year.....do....	1,084	2,056	1,119	1,147	846	4,830	4,634	323	1,317	2,126	2,073	
March.....do....	946	1,912	832	817	549	4,323	4,167	256	1,164	1,944	1,894	
May.....do....	1,127	2,048	1,193	1,333	1,009	4,883	4,689	336	1,325	2,131	2,081	
August.....do....	1,176	2,111	1,253	1,445	1,114	5,204	4,973	374	1,409	2,272	2,221	
November.....do....	1,083	2,149	1,194	1,080	798	4,840	4,633	317	1,343	2,130	2,073	
Other employees.....do....	287	421	245	267	189	861	789	76	283	356	354	
Proprietors and firm members.....do....	38	91	34	58	52	296	281	21	33	115	110	
Performing manual labor.....do....	17	84	34	42	36	177	173	13	26	75	72	
Man-hours worked by production, development, and exploration workers, total.....1,000..	2,557	4,594	2,035	2,375	1,783	10,998	10,600	634	3,239	4,647	4,557	
At mines and quarries, total.....do....	1,533	3,152	1,476	1,172	1,060	7,595	7,424	370	2,248	3,213	3,164	
Underground.....do....	56	251	10	-	-	644	644	-	155	397	397	
Open quarries.....do....	1,235	2,128	901	1,005	908	5,925	5,791	321	1,891	2,208	2,164	
Surface (including mine shops and yards).....do....	242	773	565	167	152	1,026	989	49	202	608	603	
At preparation plants.....do....	1,024	1,442	559	1,203	723	3,403	3,176	264	991	1,434	1,393	
Man-hours spent on development and exploration work (included above).....do....	-	36	21	42	38	246	238	-	109	102	94	
Principal expenses designated below, total.....\$1,000..	13,896	26,861	13,498	17,881	9,942	58,173	55,318	4,139	17,803	22,978	22,697	
Wages of production, development, and exploration workers.....do....	5,400	10,884	6,290	6,201	4,637	22,993	22,105	1,453	6,351	10,009	9,845	
Salaries of all other employees.....do....	1,599	3,626	2,400	1,738	1,167	6,055	5,515	587	2,323	2,213	2,212	
Supplies and purchases for resale.....do....	4,355	8,585	{ 3,243 -	7,191	2,132	{ 18,322 1,075	17,521	1,195	{ 5,631 564	6,464	6,381	
Stone received for preparation.....do....												298
Purchased fuel.....do....	903	1,531	357	1,292	899	4,522	4,395	313	1,430	1,751	1,725	
Purchased electric energy.....do....	716	1,083	1,003	491	203	1,306	1,229	110	336	609	604	
Contract work.....do....	923	1,152	205	968	904	3,900	3,548	481	1,168	1,634	1,632	
Purchased machinery installed.....do....	1,753	4,427	1,043	2,568	1,721	8,531	8,233	214	1,709	4,868	4,808	
Capital expenditures, total.....do....	2,838	4,447	1,629	2,652	1,784	12,117	11,669	500	3,680	5,888	5,726	
Development and exploration of mineral property.....do....	24	43	31	94	86	306	303	8	156	115	112	
Preparation plant and other construction.....do....	387	1,003	895	951	583	1,990	1,903	200	539	929	894	
New machinery and equipment.....do....	2,149	2,632	676	1,373	983	7,770	7,476	240	2,340	3,886	3,773	
Used plant and equipment.....do....	278	769	27	234	132	2,051	1,987	52	645	958	947	
Energy used.....million kwh. equivalent..	320	485	221	275	167	1,278	1,249	95	367	531	528	
Coal.....1,000 short tons..	-	(2)	6	-	-	(2)	(2)	-	-	-	-	
Distillate fuel oil.....1,000 barrels..	94	108	47	64	32	328	320	30	108	125	124	
Residual fuel oil.....do....	16	27	4	18	3	39	39	(2)	10	23	23	
Gas.....million cu. ft..	7	143	-	-	-	158	158	-	3	103	103	
Gasoline.....1,000 gallons..	1,113	2,195	189	1,284	1,223	6,599	6,287	696	2,207	2,307	2,254	
Other fuels.....\$1,000..	11	41	9	78	69	352	351	-	44	90	90	
Undistributed.....do....	195	234	15	153	144	812	810	46	221	433	433	
Electric energy purchased.....million kwh..	37	60	75	30	11	75	71	7	19	33	33	
Electric energy generated and used.....do....	-	4	1	(2)	(2)	16	16	(2)	2	10	10	
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	159	261	138	145	117	656	618	37	194	245	229	
Per production worker.....hp..	147	127	123	126	138	136	133	115	147	115	110	
Prime movers.....1,000 hp..	107	191	73	105	89	544	514	28	163	197	183	
Electric motors driven by purchased energy.....do....	52	70	65	40	28	112	104	9	31	48	46	
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	3	12	1	(2)	-	7	6	(2)	1	2	1	

See footnotes at end of table.



TABLE 3A. Detailed Statistics, by Geographic Areas: 1963—Continued

Item	1421—Crushed and broken stone industry—Continued								
	South—Continued								
	South Atlantic—Continued								
	Virginia				West Virginia		North Carolina	South Carolina	
	Industry total	Crushed and broken limestone subindustry	Crushed and broken granite subindustry	Crushed and broken stone, n.e.c., subindustry	Industry total	Crushed and broken limestone subindustry		Industry total	Crushed and broken granite subindustry
Establishments, total.....number..	95	62	16	17	37	26	52	18	14
With 0 to 19 employees.....do....	45	30	6	9	28	17	27	5	4
With 20 to 99 employees.....do....	50	32	10	8	9	9	25	12	9
With 100 employees and over.....do....	-	-	-	-	-	-	-	1	1
Including quarries.....do....	93	61	16	16	37	26	51	18	14
Including preparation plants.....do....	92	60	15	17	33	22	50	17	14
Net shipments of primary products <sup>1</sup> ...1,000 short tons..	23,017	(D)	6,504	3,580	5,504	(D)	14,224	7,744	7,054
Value of shipments and receipts.....\$1,000..	38,677	19,358	10,167	9,152	10,100	8,906	23,729	12,139	10,282
Stone transferred to other establishments for preparation and resales.....do....	559	19,358	10,167	9,152	-	-	23,729	12,139	10,282
Net shipments and receipts, total.....do....	38,118	18,346	10,067	8,913	10,100	8,906	23,467	11,677	10,010
Primary products.....do....	37,441	(D)	(D)	(D)	-	-	(D)	(D)	(D)
Other products and services.....do....	677								
Value added in mining.....do....	28,809	14,688	7,211	6,910	7,030	6,191	16,481	9,274	7,702
Persons in industry, total.....number..	2,349	1,479	469	401	601	522	1,143	728	569
Production, development, and exploration workers, average for year.....do....	2,004	1,269	407	328	496	441	962	639	503
March.....do....	1,885	1,161	415	309	467	420	964	646	515
May.....do....	2,055	1,312	418	325	490	429	1,024	626	490
August.....do....	2,117	1,368	417	332	520	458	1,019	665	521
November.....do....	1,973	1,253	376	344	495	450	828	618	484
Other employees.....do....	322	191	61	70	97	78	173	89	66
Proprietors and firm members.....do....	23	19	1	3	8	3	8	-	-
Performing manual labor.....do....	14	11	1	2	6	2	8	-	-
Man-hours worked by production, development, and exploration workers, total.....1,000..	4,533	2,782	963	788	961	834	1,981	1,402	1,121
At mines and quarries, total.....do....	2,844	1,611	774	459	628	552	1,285	977	806
Underground.....do....	19	19	-	-	165	165	-	58	-
Open quarries.....do....	1,950	1,155	454	341	318	256	832	616	513
Surface (including mine shops and yards).....do....	875	431	320	118	145	131	453	303	293
At preparation plants.....do....	1,689	1,171	189	329	333	282	696	425	315
Man-hours spent on development and exploration work (included above).....do....	23	20	-	3	38	38	22	5	5
Principal expenses designated below, total.....\$1,000..	20,713	11,049	5,282	4,382	5,999	5,233	11,132	6,003	5,072
Wages of production, development, and exploration workers.....do....	8,039	4,755	1,829	1,455	2,374	2,000	3,530	2,301	1,872
Salaries of all other employees.....do....	2,103	1,172	372	559	621	551	1,220	433	310
Supplies and purchases for resale.....do....	6,964	3,538	2,428	998	1,519	1,315	4,402	2,476	2,256
Stone received for preparation.....do....	-	-	-	-	-	-	-	-	-
Purchased fuel.....do....	1,628	644	176	808	260	210	704	275	235
Purchased electric energy.....do....	1,130	639	255	236	325	295	468	261	210
Contract work.....do....	849	301	222	326	900	862	626	257	189
Purchased machinery installed.....do....	2,438	1,438	548	452	616	508	2,025	622	596
Capital expenditures, total.....do....	3,141	1,890	673	578	550	475	1,159	1,026	906
Development and exploration of mineral property.....do....	32	15	-	17	5	5	3	5	5
Preparation plant and other construction.....do....	515	351	58	106	23	19	193	91	73
New machinery and equipment.....do....	2,207	1,238	540	429	408	378	854	877	777
Used plant and equipment.....do....	387	286	75	26	114	73	109	53	51
Energy used.....million kwh. equivalent..	967	234	82	651	87	73	400	98	81
Coal.....1,000 short tons..	51	3	1	47	(2)	(2)	34	(2)	(2)
Distillate fuel oil.....1,000 barrels..	77	31	24	22	19	18	43	32	30
Residual fuel oil.....do....	38	18	1	19	1	1	-	2	2
Gas.....million cu. ft..	622	11	21	590	3	3	-	-	-
Gasoline.....1,000 gallons..	1,482	1,211	146	125	133	111	653	387	197
Other fuels.....\$1,000..	82	48	10	24	1	1	10	11	4
Undistributed.....do....	141	98	1	42	111	71	38	-	-
Electric energy purchased.....million kwh..	74	42	17	15	20	18	30	23	18
Electric energy generated and used.....do....	1	1	-	-	(2)	(2)	-	-	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	237	144	56	37	55	50	143	70	58
Per production worker.....hp..	118	113	138	113	111	113	149	110	115
Prime movers.....1,000 hp..	164	99	41	24	36	32	83	49	40
Electric motors driven by purchased energy.....do....	73	45	15	13	19	18	60	21	18
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	1	1	-	(2)	1	1	-	-	-

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Geographic Areas: 1963—Continued

Item	1421.—Crushed and broken stone industry—Continued									
	South—Continued									
	South Atlantic—Continued					East South Central				
	Georgia				Florida	Division, total		Kentucky	Tennessee	Alabama
	Industry total	Crushed and broken limestone subindustry	Crushed and broken granite subindustry	Crushed and broken stone, n.e.c., subindustry		Industry total	Crushed and broken limestone subindustry			
Establishments, total.....number..	37	10	18	9	76	223	211	108	83	32
With 0 to 19 employees.....do....	7	2	3	2	53	130	121	61	53	16
With 20 to 99 employees.....do....	27	8	14	5	20	92	90	47	30	15
With 100 employees and over.....do....	3	-	1	2	3	1	-	-	-	1
Including quarries.....do....	36	9	18	9	70	219	209	107	81	31
Including preparation plants.....do....	37	10	18	9	72	217	207	105	80	32
Net shipments of primary products <sup>1</sup> ...1,000 short tons..	17,933	2,078	13,788	2,067	21,973	55,096	54,608	24,138	21,115	9,843
Value of shipments and receipts.....\$1,000..	35,578	6,152	20,265	9,161	29,156	81,098	77,349	37,151	27,898	16,049
Stone transferred to other establishments for preparation and resales.....do....	1,152	6,152	20,265	9,161	515	2,993	2,823	1,201	174	1,618
Net shipments and receipts, total.....do....	34,426				28,641	78,105	74,526	35,950	27,724	14,431
Primary products.....do....	33,587	5,069	19,816	8,702	27,984	75,609	72,837	34,472	27,724	14,431
Other products and services.....do....	839	(D)	(D)	-	657	2,496	1,689	1,478		
Value added in mining.....do....	23,166	4,103	12,652	6,411	21,691	63,162	60,134	30,142	21,636	11,384
Persons in industry, total.....number..	1,789	310	1,012	467	1,643	4,727	4,377	2,219	1,526	982
Production, development, and exploration workers, average for year.....do....	1,602	280	909	413	1,450	4,044	3,732	1,872	1,302	870
March.....do....	1,591	278	914	399	1,409	3,588	3,286	1,608	1,175	805
May.....do....	1,619	289	919	411	1,456	4,170	3,858	1,966	1,346	858
August.....do....	1,608	274	914	420	1,468	4,358	4,037	2,051	1,380	927
November.....do....	1,581	278	888	415	1,485	4,026	3,717	1,856	1,292	878
Other employees.....do....	187	30	103	54	167	585	551	287	193	105
Proprietors and firm members.....do....	-	-	-	-	26	98	94	60	31	7
Performing manual labor.....do....	-	-	-	-	21	47	43	22	19	6
Man-hours worked by production, development, and exploration workers, total.....1,000..	3,725	820	2,234	671	3,640	9,189	8,521	4,218	3,017	1,954
At mines and quarries, total.....do....	2,106	375	1,469	262	1,508	5,742	5,547	2,892	1,821	1,029
Underground.....do....	153	-	103	50	-	541	541	492	49	-
Open quarries.....do....	1,532	324	1,024	184	1,336	4,339	4,160	1,976	1,579	784
Surface (including mine shops and yards).....do....	421	51	342	28	172	862	846	424	193	245
At preparation plants.....do....	1,619	445	765	409	2,132	3,447	2,974	1,326	1,196	925
Man-hours spent on development and exploration work (included above).....do....	9	6	3	-	128	185	163	137	28	20
Principal expenses designated below, total.....\$1,000..	20,862	3,860	12,456	4,546	16,667	41,920	39,523	18,412	13,486	10,022
Wages of production, development, and exploration workers.....do....	7,034	1,356	4,000	1,678	6,949	16,261	15,065	7,504	4,970	3,787
Salaries of all other employees.....do....	1,305	294	731	280	1,248	3,515	3,328	1,787	1,179	549
Supplies and purchases for resale.....do....										
Stone received for preparation.....do....	10,470	1,581	6,749	2,140	5,081	13,942	13,288	6,078	5,128	2,736
Purchased fuel.....do....	893	364	446	83	453	1,793	1,662	60	171	1,562
Purchased electric energy.....do....	905	151	522	232	947	2,651	2,596	1,306	977	368
Contract work.....do....	255	114	8	133	997	2,031	1,926	885	711	435
Purchased machinery installed.....do....	3,195	275	2,215	705	1,922	7,223	6,057	2,880	2,035	2,308
Capital expenditures, total.....do....	3,306	436	2,327	543	2,927	11,431	9,972	4,992	3,110	3,329
Development and exploration of mineral property.....do....	62	12	50	-	29	308	296	249	39	20
Preparation plant and other construction.....do....	861	47	734	80	976	1,925	1,687	901	545	479
New machinery and equipment.....do....	2,089	351	1,398	340	1,643	7,183	6,004	2,677	2,209	2,297
Used plant and equipment.....do....	294	26	145	123	279	2,015	1,985	1,165	317	533
Energy used.....million kwh. equivalent..	446	202	174	70	336	886	836	362	308	216
Coal.....1,000 short ones..	5	-	(2)	5	-	2	2	-	2	(2)
Distillate fuel oil.....1,000 barrels..	67	9	53	5	94	125	125	64	46	15
Residual fuel oil.....do....	90	76	14	-	3	64	60	23	25	16
Gas.....million cu. ft..	1	1	-	-	16	351	257	38	62	257
Gasoline.....1,000 gallons..	828	429	340	59	1,202	3,198	3,197	1,935	928	335
Other fuels.....\$1,000..	91	63	24	4	45	153	153	89	34	30
Undistributed.....do....	7	7	-	-	173	544	526	215	229	100
Electric energy purchased.....million kwh..	74	14	40	20	68	144	136	55	51	38
Electric energy generated and used.....do....	2	2	-	-	-	(2)	(2)	(2)	(2)	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	130	23	74	33	134	452	436	230	149	73
Per production worker.....hp..	82	86	81	80	92	112	117	123	114	83
Prime movers.....1,000 hp..	77	15	47	15	91	278	271	142	97	39
Electric motors driven by purchased energy.....do....	53	8	27	18	43	174	165	88	52	34
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	1	1	-	-	(2)	3	3	2	(2)	1

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Geographic Areas: 1963—Continued

Item	1421.—Crushed and broken stone industry—Continued								Mountain division, total	
	South—Continued									
	West South Central									
	Division, total		Arkansas and Louisiana	Oklahoma		Texas				
	Industry total	Crushed and broken limestone subindustry		Industry total	Crushed and broken limestone subindustry	Industry total	Crushed and broken limestone subindustry	Industry total	Crushed and broken limestone subindustry	
Establishments, total.....number..	100	73	24	32	23	44	35	82	33	
With 0 to 19 employees.....do....	51	35	13	17	10	21	16	74	29	
With 20 to 99 employees.....do....	44	35	9	14	12	21	17	8	4	
With 100 employees and over.....do....	5	3	2	1	1	2	2	-	-	
Including quarries.....do....	98	73	23	31	23	44	35	80	33	
Including preparation plants.....do....	87	64	19	27	19	41	34	78	32	
Net shipments of primary products <sup>1</sup> ...1,000 short tons..	34,562	25,914	8,068	10,963	8,784	15,531	14,428	4,977	2,189	
Value of shipments and receipts.....\$1,000..	54,864	30,324	23,956	11,569	9,412	19,339	17,212	10,288	5,261	
Stone transferred to other establishments for preparation and resale.....do....	159	43	68	11,569	-	19,339	17,212	-	-	
Net shipments and receipts, total.....do....	54,705	30,281	23,888	11,569	9,412	19,339	17,212	10,288	5,261	
Primary products.....do....	49,063	28,093	20,364	11,245	9,412	17,454	15,527	10,228	5,226	
Other products and services.....do....	5,642	2,188	3,524	(D)	(D)	(D)	(D)	60	35	
Value added in mining.....do....	37,442	22,536	14,954	8,655	7,339	13,833	12,436	7,841	4,339	
Persons in industry, total.....number..	3,043	2,083	918	774	650	1,351	1,180	683	339	
Production, development, and exploration workers, average for year.....do....	2,605	1,779	794	639	526	1,172	1,018	557	268	
March.....do....	2,475	1,678	750	606	506	1,119	967	516	224	
May.....do....	2,691	1,855	812	686	580	1,193	1,041	549	259	
August.....do....	2,694	1,823	818	649	519	1,227	1,062	625	304	
November.....do....	2,530	1,721	783	602	489	1,145	982	546	284	
Other employees.....do....	413	289	123	127	120	163	151	89	59	
Proprietors and firm members.....do....	25	15	1	8	4	16	11	37	12	
Performing manual labor.....do....	11	4	-	5	2	6	2	24	4	
Man-hours worked by production, development, and exploration workers, total.....1,000..	6,065	4,088	1,857	1,466	1,203	2,742	2,366	1,069	545	
At mines and quarries, total.....do....	3,645	2,561	1,065	867	789	1,713	1,460	657	392	
Underground.....do....	162	74	156	-	-	6	-	76	56	
Open quarries.....do....	3,130	2,198	864	773	713	1,493	1,270	472	281	
Surface (including mine shops and yards).....do....	353	289	45	94	76	214	190	109	55	
At preparation plants.....do....	2,420	1,527	792	599	414	1,029	906	412	153	
Man-hours spent on development and exploration work (included above).....do....	203	202	8	153	153	42	41	9	6	
Principal expenses designated below, total.....\$1,000..	34,869	20,242	13,936	6,975	5,590	13,958	12,603	5,814	2,693	
Wages of production, development, and exploration workers.....do....	12,069	8,011	3,906	2,975	2,525	5,188	4,627	2,741	1,360	
Salaries of all other employees.....do....	2,652	2,001	689	706	674	1,257	1,222	314	159	
Supplies and purchases for resale.....do....	15,337	7,542	7,310	2,204	1,567	5,823	5,190	1,900	625	
Stone received for preparation.....do....	14	14	14	-	-	-	-	-	-	
Purchased fuel.....do....	1,728	1,110	598	515	403	615	535	337	239	
Purchased electric energy.....do....	1,156	743	362	354	274	440	405	168	86	
Contract work.....do....	1,913	821	1,057	221	147	635	624	354	224	
Purchased machinery installed.....do....	3,690	2,510	1,104	753	627	1,833	1,625	673	322	
Capital expenditures, total.....do....	6,416	4,952	1,443	1,133	945	3,840	3,603	985	574	
Development and exploration of mineral property.....do....	43	27	8	21	14	14	6	31	29	
Preparation plant and other construction.....do....	1,765	1,334	353	403	360	1,009	946	144	85	
New machinery and equipment.....do....	4,011	3,026	981	645	529	2,385	2,229	705	384	
Used plant and equipment.....do....	597	565	101	64	42	432	422	105	76	
Energy used.....million kwh. equivalent..	673	403	254	232	122	278	253	179	149	
Coal.....1,000 short tons..	-	-	-	-	-	-	-	(2)	(2)	
Distillate fuel oil.....1,000 barrels..	88	80	18	25	23	45	44	8	5	
Residual fuel oil.....do....	9	4	-	3	1	6	3	10	3	
Gas.....million cu. ft.	792	309	468	353	93	267	267	358	358	
Gasoline.....1,000 gallons..	2,178	1,190	1,014	273	249	891	805	264	190	
Other fuels.....\$1,000..	243	186	19	85	85	139	101	16	18	
Undistributed.....do....	156	69	56	67	-	33	20	57	33	
Electric energy purchased.....million kwh..	86	59	24	28	23	34	32	9	5	
Electric energy generated and used.....do....	7	7	-	1	1	6	6	1	(2)	
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	248	190	52	51	38	145	131	64	38	
Per production worker.....do....	95	107	65	80	72	124	129	115	142	
Prime movers.....1,000 hp..	174	144	28	32	23	114	105	53	33	
Electric motors driven by purchased energy.....do....	74	46	24	19	15	31	26	11	5	
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	4	4	1	1	1	2	2	1	(2)	
See footnotes at end of table.										

See footnotes at end of table.



TABLE 3A. Detailed Statistics, by Geographic Areas: 1963—Continued

Item	1421.—Crushed and broken stone industry—Continued													
	Pacific										Hawaii (crushed and broken stone, n.e.c., sub- industry)			
	Division, total				Wash- ington	Oregon		California						
	Industry total	Crushed and broken limestone subindustry	Crushed and broken granite subindustry	Crushed and broken stone, n.e.c., subindustry		Industry total	Crushed and broken stone, n.e.c., subindustry	Industry total	Crushed and broken stone, n.e.c., subindustry					
Hawaii														
Establishments, total.....number..	298	54	44	200	52	66	58	156	86	24	19			
With 0 to 19 employees.....do....	262	46	40	176	48	57	53	137	74	20	15			
With 20 to 99 employees.....do....	35	8	3	24	4	9	5	18	12	4	4			
With 100 employees and over.....do....	1	-	1	-	-	-	-	1	-	-	-			
Including quarries.....do....	290	54	44	192	50	64	56	154	84	22	17			
Including preparation plants.....do....	252	47	39	166	47	50	44	134	72	21	17			
Net shipments of primary products <sup>1</sup> ...1,000 short tons..	28,212	4,494	5,329	18,258	2,947	4,707	3,859	18,373	9,931	2,185	2,024			
Value of shipments and receipts.....\$1,000..	52,466	8,110	10,916	33,440	5,769	8,315	7,095	32,858	16,270	5,524	5,350			
Stone transferred to other establishments for preparation and resales.....do....	1,752	8,110	10,916	1,623	283	803	802	518	390	5,524	5,350			
Net shipments and receipts, total.....do....	50,714			31,817	5,486	7,512	6,293	32,340	15,880					
Primary products.....do....	47,283			28,754	5,149	7,254	6,035	30,282	14,193					
Other products and services.....do....	3,431			3,063	337	258	258	2,058	1,687					
Value added in mining.....do....	38,025	6,560	8,772	22,693	4,243	5,130	3,989	24,558	11,312	4,094	3,958			
Persons in industry, total.....number..	2,831	591	436	1,804	335	594	481	1,613	797	289	280			
Production, development, and exploration workers, average for year.....do....	2,296	504	312	1,480	258	502	400	1,275	633	261	255			
March.....do....	2,159	453	305	1,401	214	467	374	1,232	621	246	241			
May.....do....	2,274	488	310	1,476	243	502	401	1,276	641	253	247			
August.....do....	2,433	526	318	1,589	280	545	430	1,337	674	271	265			
November.....do....	2,345	530	316	1,499	292	489	394	1,296	649	268	262			
Other employees.....do....	372	68	89	215	51	56	48	241	109	24	23			
Proprietors and firm members.....do....	163	19	35	109	26	36	33	97	55	4	2			
Performing manual labor.....do....	125	14	33	78	15	18	16	88	49	4	2			
Man-hours worked by production, development, and exploration workers, total.....1,000..	4,747	1,136	661	2,950	509	952	734	2,774	1,365	512	497			
At mines and quarries, total.....do....	2,921	841	325	1,755	294	672	478	1,666	822	289	277			
Underground.....do....	149	113	-	36	15	-	-	134	24	-	-			
Open quarries.....do....	2,322	650	305	1,367	220	574	388	1,301	647	227	216			
Surface (including mine shops and yards).....do....	450	78	20	352	59	98	90	231	151	62	61			
At preparation plants.....do....	1,826	295	336	1,195	215	280	256	1,108	543	223	220			
Man-hours spent on development and exploration work (included above).....do....	124	116	3	5	2	4	2	118	1	-	-			
Principal expenses designated below, total.....\$1,000..	32,901	5,203	5,641	22,057	3,495	6,708	5,829	19,480	10,363	3,218	3,140			
Wages of production, development, and exploration workers.....do....	14,205	2,568	2,048	9,589	1,577	2,822	2,317	8,409	4,683	1,397	1,368			
Salaries of all other employees.....do....	2,422	445	649	1,328	249	326	288	1,645	643	202	199			
Supplies and purchases for resale.....do....	10,776	1,394	2,406	6,976	985	2,356	2,142	6,552	3,225	1,357	1,328			
Stone received for preparation.....do....	912	111	-	801				438	328	-	-			
Purchased fuel.....do....	1,704	361	218	1,125				243	358	282	982	561	121	112
Purchased electric energy.....do....	913	172	197	544				64	106	92	644	317	99	97
Contract work.....do....	1,969	152	123	1,694	377	740	708	810	606	42	36			
Purchased machinery installed.....do....	3,710	119	718	2,873	401	434	412	2,607	1,842	268	268			
Capital expenditures, total.....do....	5,543	759	1,518	3,266	544	809	530	3,733	1,921	457	439			
Development and exploration of mineral property.....do....	123	20	42	61	20	6	-	81	35	16	16			
Preparation plant and other construction.....do....	1,313	116	675	522	145	258	75	888	311	22	20			
New machinery and equipment.....do....	2,801	508	375	1,918	318	445	378	1,648	955	390	376			
Used plant and equipment.....do....	1,306	115	426	765	61	100	77	1,116	620	29	27			
Energy used.....million kwh. equivalent..	707	165	103	439	75	100	80	498	271	34	34			
Coal.....do....	-	-	-	-	-	-	-	-	-	-	-			
Distillate fuel oil.....1,000 barrels..	93	45	5	43	6	23	23	60	10	4	4			
Residual fuel oil.....do....	95	2	4	89	2	1	1	90	85	2	2			
Gas.....million cu. ft..	253	-	153	100	73	-	-	180	27	-	-			
Gasoline.....1,000 gallons..	1,346	128	93	1,125	229	462	449	552	349	103	103			
Other fuels.....\$1,000..	258	62	48	148	31	50	21	156	76	21	21			
Undistributed.....do....	521	221	36	264	81	93	49	308	163	39	39			
Electric energy purchased.....million kwh..	58	11	16	31	3	7	6	43	18	5	5			
Electric energy generated and used.....do....	12	(2)	-	12	2	10	10	(2)	-	(2)	(2)			
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	265	44	31	190	43	54	47	131	71	37	36			
Per production worker.....hp..	115	87	99	128	167	108	117	103	112	142	141			
Prime movers.....1,000 hp..	194	30	19	145	34	40	35	87	48	33	33			
Electric motors driven by purchased energy.....do....	71	14	12	45	9	14	12	44	23	4	3			
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	2	(2)	-	2	1	1	1	(2)	-	(2)	(2)			

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
(Z) Less than half of the unit of measure shown.

n.e.c. Not elsewhere classified.  
<sup>1</sup>Represents the product indicated by the name of the industry or subindustry. (Industry totals for all stone therefore exceed the sum of the total for the subindustries.) Net shipments for crushed and broken stone represents gross shipments less stone received for crushing.  
<sup>2</sup>Represents stone received for crushing.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1963

Item	Crushed and broken limestone subindustry									
	All establishments	Producing establishments								
		All producing establishments	Open quarries				Combination open and underground quarries with crushing plants	Underground quarries with crushing plants	Separately operated preparation plants	
			Quarries only	Quarries with preparation plants		With crushing			With screening, but no crushing, and other preparation methods	With crushing and screening only
Establishments, total.....number..	1,612	1,586	57	1,376	57	15	56	11	14	
With 0 to 19 employees.....do....	1,121	1,096	47	958	53	1	20	8	9	
With 20 to 99 employees.....do....	464	464	10	396	4	12	35	3	4	
With 100 employees and over.....do....	27	26	-	22	-	2	1	-	1	
Including quarries.....do....	1,587	1,561	57	1,376	57	15	56	-	-	
Including preparation plants.....do....	1,529	1,529	-	1,376	57	15	56	11	14	
Net shipments of primary products <sup>1</sup> ...1,000 short tons..	355,812	355,812	8,197	318,926	4,912	4,400	14,673	2,477	2,227	
Value of shipments and receipts.....\$1,000..	542,886	542,886	10,628	470,654	7,305	9,717	26,246	6,134	12,202	
Stone transferred to other establishments for preparation and resales.....do....	14,886	14,886	-	6,477	7,305	329	616	-	4,666	
Net shipments and receipts, total.....do....	528,000	528,000	10,628	464,177	7,305	9,388	25,630	6,134	7,536	
Primary products.....do....	503,289	503,289	10,384	443,693	7,128	7,156	24,971	3,288	6,669	
Other products and services.....do....	24,711	24,711	244	20,484	(D)	2,232	659	(D)	867	
Value added in mining.....do....	408,450	408,642	7,837	360,562	4,414	7,191	20,292	2,428	5,918	
Persons in industry, total.....number..	31,853	30,989	522	26,884	447	781	1,764	189	402	
Production, development, and exploration workers, average for year.....do....	26,331	26,242	441	22,732	367	660	1,558	146	338	
March.....do....	23,051	22,984	393	19,728	321	615	1,486	131	310	
May.....do....	27,164	27,085	453	23,495	375	676	1,605	157	324	
August.....do....	28,296	28,194	490	24,532	413	670	1,566	151	372	
November.....do....	26,559	26,457	425	22,925	362	681	1,567	144	353	
Other employees.....do....	24,764	4,001	45	3,555	20	77	197	43	64	
Proprietors and firm members.....do....	758	746	36	597	60	44	9	-	-	
Performing manual labor.....do....	499	492	29	384	55	16	8	-	-	
Man-hours worked by production, development, and exploration workers, total.....1,000..	59,365	59,207	928	51,562	815	1,428	3,334	271	869	
At mines and quarries, total.....do....	38,322	38,164	928	33,274	564	976	2,422	-	-	
Underground.....do....	2,253	2,253	-	-	-	325	1,928	-	-	
Open quarries.....do....	29,270	29,112	786	27,395	487	444	-	-	-	
Surface (including mine shops and yards).....do....	6,799	6,799	142	5,879	77	207	494	-	-	
At preparation plants.....do....	21,043	21,043	-	18,288	251	452	912	271	869	
Man-hours spent on development and exploration work (included above).....do....	1,087	1,080	12	822	2	87	126	-	31	
Principal expenses designated below, total.....\$1,000..	313,915	306,539	5,623	259,947	5,103	6,352	15,432	4,853	9,229	
Wages of production, development, and exploration workers.....do....	126,791	126,497	2,046	110,113	1,637	2,755	7,292	674	1,980	
Salaries of all other employees.....do....	233,797	26,848	301	23,273	142	590	1,554	305	683	
Supplies and purchases for resale.....do....	96,967	96,905	1,599	82,625	2,525	-	-	-	-	
Stone received for preparation.....do....	7,061	7,061	-	1,109	-	2,116	4,703	2,137	1,404	
Purchased fuel.....do....	18,960	18,929	328	16,896	245	346	725	132	257	
Purchased electric energy.....do....	13,930	13,925	129	12,097	165	311	799	118	306	
Contract work.....do....	16,409	16,374	1,220	13,834	389	234	359	190	148	
Purchased machinery installed.....do....	40,644	40,261	551	35,247	822	706	1,628	84	1,223	
Capital expenditures, total.....do....	59,535	59,211	1,036	51,716	1,255	1,187	2,260	252	1,505	
Development and exploration of mineral property.....do....	1,034	1,004	3	886	31	45	39	-	-	
Preparation plant and other construction.....do....	11,829	11,801	46	10,549	36	458	348	208	156	
New machinery and equipment.....do....	37,213	37,123	738	32,640	793	346	1,635	35	936	
Used plant and equipment.....do....	9,459	9,283	249	7,641	395	338	238	9	413	
Energy used.....million kwh equivalent..	6,465	6,459	120	5,595	81	108	285	61	209	
Coal.....1,000 short tons..	26	26	-	22	-	1	-	3	-	
Distillate fuel oil.....1,000 barrels..	1,284	1,284	18	1,177	8	14	42	10	15	
Residual fuel oil.....do....	308	308	-	198	3	10	12	3	82	
Gas.....million cu. ft..	1,452	1,452	-	1,196	-	11	243	2	-	
Gasoline.....1,000 gallons..	24,587	24,557	986	21,152	454	789	915	160	101	
Other fuels.....\$1,000..	1,238	1,238	20	1,099	39	16	45	3	16	
Undistributed.....do....	3,922	3,901	159	3,577	85	14	65	1	-	
Electric energy purchased.....million kwh..	910	910	10	777	15	19	56	8	25	
Electric energy generated and used.....do....	36	36	(2)	30	(2)	(2)	1	3	2	
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	3,219	3,209	42	2,812	40	68	149	14	84	
Per production worker.....hp..	122	122	95	124	109	103	96	96	248	
Prime movers.....1,000 hp..	2,237	2,230	34	1,958	30	45	93	11	59	
Electric motors driven by purchased energy.....do....	982	979	8	854	10	23	56	3	25	
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	38	38	(2)	31	(2)	(2)	5	2	-	

See footnotes at end of table.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1963—Continued

Item	Crushed and broken granite subindustry		Crushed and broken stone, n.e.c., subindustry					
	All establishments	Quarries with preparation plants	All establishments	Producing establishments				
				All producing establishments	Open quarries		Underground and combination open and underground quarries	Separately operated preparation plants, except with crushing only
					Quarries only	With crushing		
Establishments, total.....number..	150	140	494	488	60	388	8	13
With 0 to 19 employees.....do....	85	77	382	378	54	295	3	10
With 20 to 99 employees.....do....	60	58	100	98	6	85	3	3
With 100 employees and over.....do....	5	5	12	12	-	8	2	-
Including quarries.....do....	150	140	473	467	60	388	8	-
Including preparation plants.....do....	140	140	428	428	-	388	8	13
Net shipments of primary products <sup>1</sup> ...1,000 short tons..	48,672	47,332	68,449	68,449	3,973	59,854	1,211	1,483
Value of shipments and receipts.....\$1,000..	89,749	87,101	162,225	162,225	7,430	137,827	7,451	5,513
Stone transferred to other establishments for preparation and resale.....do....	187	183	4,068	4,068	7,430	1,966	7,451	5,513
Net shipments and receipts, total.....do....	89,562	86,918	158,157	158,157				
Primary products.....do....	85,140	82,708	149,203	149,203	7,341	127,581	6,822	4,614
Other products and services.....do....	4,422	4,210	8,954	8,954	(D)	8,280	(D)	(D)
Value added in mining.....do....	61,702	59,355	111,503	111,664	4,574	95,767	(D)	2,980
Persons in industry, total.....number..	4,103	3,979	8,309	7,649	398	6,495	(D)	219
Production, development, and exploration workers, average for year.....do....	3,449	3,341	6,406	6,370	348	5,370	303	183
March.....do....	3,439	3,345	5,652	5,621	282	4,727	283	173
May.....do....	3,566	3,448	6,582	6,553	346	5,570	299	172
August.....do....	3,544	3,419	7,183	7,141	396	6,074	304	199
November.....do....	3,244	3,147	6,476	6,433	356	5,395	320	189
Other employees.....do....	611	598	<sup>2</sup> 1,675	1,057	26	943	(D)	32
Proprietors and firm members.....do....	43	40	228	222	24	182	1	4
Performing manual labor.....do....	41	38	153	149	15	120	1	2
Man-hours worked by production, development, and exploration workers, total.....1,000..	7,894	7,680	13,575	13,510	649	11,512	668	390
At mines and quarries, total.....do....	5,137	4,954	7,143	7,088	649	5,971	369	-
Underground.....do....	121	103	312	312	-	-	312	-
Open quarries.....do....	3,589	3,449	5,561	5,506	549	4,833	40	-
Surface (including mine shops and yards).....do....	1,427	1,402	1,270	1,270	100	1,138	17	-
At preparation plants.....do....	2,757	2,726	6,432	6,422	-	5,541	299	390
Man-hours spent on development and exploration work (included above).....do....	43	43	109	108	6	80	2	-
Principal expenses designated below, total.....\$1,000..	48,572	47,352	102,513	96,801	4,495	82,637	(D)	3,694
Wages of production, development, and exploration workers.....do....	16,010	15,382	35,042	34,930	1,440	30,278	1,436	858
Salaries of all other employees.....do....	3,816	3,750	<sup>2</sup> 13,659	8,230	139	7,584	214	207
Supplies and purchases for resale.....do....	22,734	22,456	37,644	37,556	778	32,918	(D)	1,743
Stone received for preparation.....do....	87	87	1,903	1,903				
Purchased fuel.....do....	1,867	1,807	5,256	5,243	290	4,604	77	177
Purchased electric energy.....do....	1,883	1,853	3,994	3,991	62	3,585	190	104
Contract work.....do....	2,175	2,017	5,015	4,948	1,786	3,080	2	30
Purchased machinery installed.....do....	6,486	6,374	12,877	12,855	442	11,447	448	188
Capital expenditures, total.....do....	7,185	6,848	15,967	15,935	503	14,162	472	284
Development and exploration of mineral property.....do....	146	98	222	222	29	158	-	3
Preparation plant and other construction.....do....	1,782	2,034	5,130	5,100	165	4,697	65	97
New machinery and equipment.....do....	4,425	3,978	9,173	9,173	235	8,103	287	167
Used plant and equipment.....do....	832	738	1,440	1,440	74	1,204	120	17
Energy used.....million kwh.equivalent..	812	791	2,583	2,578	164	2,261	56	61
Coal.....do....1,000 short tons..	6	6	109	109	-	105	4	-
Distillate fuel oil.....do....1,000 barrels..	155	151	238	236	4	197	5	21
Residual fuel oil.....do....	32	32	178	178	64	105	-	-
Gas.....do....million cu. ft..	630	609	1,024	1,024	12	979	-	27
Gasoline.....do....1,000 gallons..	2,171	2,162	4,059	4,009	86	3,692	53	137
Other fuels.....do....\$1,000..	96	76	487	487	12	462	1	12
Undistributed.....do....	46	39	735	735	104	613	-	12
Electric energy purchased.....million kwh..	135	134	253	253	4	228	15	6
Electric energy generated and used.....do....	-	-	13	13	(Z)	13	-	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	362	347	688	685	33	596	23	18
Per production worker.....do....hp..	105	104	107	108	95	111	76	98
Prime movers.....do....1,000 hp..	237	226	433	431	25	376	10	11
Electric motors driven by purchased energy.....do....	125	121	255	254	8	220	13	7
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	-	-	4	4	-	4	-	(Z)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
 (Z) Less than 500 horsepower.

n.e.c. Not elsewhere classified.

<sup>1</sup>Represents the product indicated by the name of the subindustry. Net shipments represent gross shipments less stone received for crushing.

<sup>2</sup>Includes data for separately reported central offices and related facilities. These were not distributed by type of operation.

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1411.—DIMENSION STONE INDUSTRY											
Establishments.....number..	319	200	51	43	22	2	1	-	-	-	-
All employees:											
Total.....do....	2,156	298	347	571	940	(D)	(D)	-	-	-	-
Payroll.....\$1,000..	7,844	868	1,197	2,018	3,761	(D)	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,970	291	295	518	866	(D)	(D)	-	-	-	-
Man-hours.....1,000..	3,820	499	575	930	1,816	(D)	(D)	-	-	-	-
Wages.....\$1,000..	6,986	852	989	1,797	3,348	(D)	(D)	-	-	-	-
Value added in mining.....do....	14,842	2,165	2,042	4,196	6,439	(D)	(D)	-	-	-	-
Value of shipments and receipts.....do....	19,735	2,762	2,761	5,573	8,639	(D)	(D)	-	-	-	-
Capital expenditures.....do....	1,114	299	161	225	429	(D)	(D)	-	-	-	-
Dimension Limestone Subindustry											
Establishments.....number..	61	41	9	6	5	-	-	-	-	-	-
All employees:											
Total.....do....	326	50	55	75	146	-	-	-	-	-	-
Payroll.....\$1,000..	1,266	119	180	350	617	-	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	286	48	45	65	128	-	-	-	-	-	-
Man-hours.....1,000..	568	80	86	125	277	-	-	-	-	-	-
Wages.....\$1,000..	1,108	116	139	322	531	-	-	-	-	-	-
Value added in mining.....do....	2,947	447	326	589	1,585	-	-	-	-	-	-
Value of shipments and receipts.....do....	3,513	529	467	707	1,810	-	-	-	-	-	-
Capital expenditures.....do....	282	67	58	53	104	-	-	-	-	-	-
Producing establishment, by type of operation, total.....number..	61	41	9	6	5	-	-	-	-	-	-
Quarries only (open quarries).....do....	58	39	9	5	5	-	-	-	-	-	-
Quarries with crushing plants (open quarries).....do....	3	2	-	1	-	-	-	-	-	-	-
Dimension Granite Subindustry											
Establishments.....number..	66	24	18	14	7	2	1	-	-	-	-
All employees:											
Total.....do....	824	41	114	186	483	(D)	(D)	-	-	-	-
Payroll.....\$1,000..	3,601	151	423	709	2,318	(D)	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	773	41	109	171	452	(D)	(D)	-	-	-	-
Man-hours.....1,000..	1,645	89	226	331	999	(D)	(D)	-	-	-	-
Wages.....\$1,000..	3,271	151	401	644	2,075	(D)	(D)	-	-	-	-
Value added in mining.....do....	6,513	361	740	1,727	3,685	(D)	(D)	-	-	-	-
Value of shipments and receipts.....do....	9,428	500	1,166	2,409	5,353	(D)	(D)	-	-	-	-
Capital expenditures.....do....	385	10	40	69	266	(D)	(D)	-	-	-	-
Producing establishments, by type of operation, total.....number..	66	24	18	14	7	2	1	-	-	-	-
Quarries only:											
Open quarries.....do....	64	24	18	13	7	2	-	-	-	-	-
Underground quarries.....do....	1	-	-	1	-	-	-	-	-	-	-
Quarries with crushing plants (open quarries).....do....	1	-	-	-	-	-	1	-	-	-	-
Dimension Stone, N.E.C., Subindustry											
Establishments.....number..	192	135	24	23	10	-	-	-	-	-	-
All employees:											
Total.....do....	1,006	207	178	310	311	-	-	-	-	-	-
Payroll.....\$1,000..	2,977	598	594	959	826	-	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	911	202	141	282	286	-	-	-	-	-	-
Man-hours.....1,000..	1,607	330	263	474	540	-	-	-	-	-	-
Wages.....\$1,000..	2,607	585	449	831	742	-	-	-	-	-	-
Value added in mining.....do....	5,382	1,357	976	1,880	1,169	-	-	-	-	-	-
Value of shipments and receipts.....do....	6,794	1,733	1,128	2,457	1,476	-	-	-	-	-	-
Capital expenditures.....do....	44.7	222	63	103	59	-	-	-	-	-	-
Producing establishments, by type of operation, total.....number..	183	127	23	23	10	-	-	-	-	-	-
Quarries only:											
Open quarries.....do....	173	120	22	22	9	-	-	-	-	-	-
Underground quarries.....do....	2	1	1	-	-	-	-	-	-	-	-
Quarries with crushing plants (open quarries).....do....	8	6	-	1	1	-	-	-	-	-	-
1421.—CRUSHED AND BROKEN STONE INDUSTRY											
Establishments.....number..	2,256	697	317	574	500	127	35	5	1	-	-
All employees:											
Total.....do....	143,236	1,136	2,163	8,176	14,873	8,617	4,879	2,052	(D)	-	-
Payroll.....\$1,000..	1229,115	5,108	9,749	39,785	75,199	45,791	29,687	11,586	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	36,186	1,063	1,878	7,094	12,743	7,426	4,105	1,877	(D)	-	-
Man-hours.....1,000..	80,834	2,270	4,153	15,493	29,080	16,827	9,063	3,948	(D)	-	-
Wages.....\$1,000..	177,843	4,826	8,449	32,929	61,207	36,848	23,031	10,553	(D)	-	-

See footnotes at end of table.

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963—Continued

Item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1421.—CRUSHED AND BROKED STONE INDUSTRY—Continued											
Value added in mining.....\$1,000..	581,655	22,162	26,311	99,242	199,556	122,048	87,608	<u>24,728</u>	(D)	-	-
Value of shipments and receipts.....do....	794,860	34,170	36,469	136,179	267,569	168,771	120,203	<u>31,499</u>	(D)	-	-
Capital expenditures.....do....	82,687	4,327	5,167	17,070	28,671	15,446	8,940	<u>3,066</u>	(D)	-	-
Crushed and Broken Limestone Subindustry											
Establishments.....number..	1,612	449	229	443	373	92	21	4	1	-	-
All employees:											
Total.....do....	<sup>1</sup> 31,095	739	1,570	6,349	10,911	6,108	<u>4,673</u>	(D)	(D)	-	-
Payroll.....\$1,000..	160,588	3,146	6,911	30,220	53,724	32,094	<u>27,619</u>	(D)	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	26,331	687	1,376	5,549	9,233	5,323	<u>4,163</u>	(D)	(D)	-	-
Man-hours.....1,000..	59,365	1,591	3,079	12,256	21,287	12,188	<u>8,964</u>	(D)	(D)	-	-
Wages.....\$1,000..	126,791	2,974	6,049	25,103	42,902	26,230	<u>23,533</u>	(D)	(D)	-	-
Value added in mining.....do....	408,450	15,381	19,085	76,201	141,994	87,715	<u>68,074</u>	(D)	(D)	-	-
Value of shipments and receipts.....do....	542,886	23,393	25,853	103,400	186,487	116,635	<u>87,118</u>	(D)	(D)	-	-
Capital expenditures.....do....	59,535	3,230	3,602	12,960	22,143	10,754	<u>6,846</u>	(D)	(D)	-	-
Producing establishments, by type of operation, total.....number..	1,586	394	227	440	372	92	21	4	1	-	-
Quarries only (open quarries).....do....	57	2	3	7	9	1	-	-	-	-	-
Quarries with preparation plants:											
Open quarries with dimension stone dressing only.....do....	4	1	3	-	-	-	-	-	-	-	-
Open quarries with crushing plants.....do....	1,376	345	212	401	317	79	17	4	1	-	-
Open quarries with screening but no crushing.....do....	26	12	4	6	2	2	-	-	-	-	-
Open quarries with other preparation methods only.....do....	27	27	3	-	-	-	-	-	-	-	-
Combination open and underground quarries with crushing plants.....do....	15	-	-	1	11	1	2	-	-	-	-
Underground quarries with crushing plants.....do....	56	4	2	14	28	7	1	-	-	-	-
Separately operated preparation plants:											
With crushing only.....do....	7	2	2	2	1	-	-	-	-	-	-
With washing only.....do....	1	1	-	-	-	-	-	-	-	-	-
With crushing and screening only.....do....	11	-	1	7	3	-	-	-	-	-	-
With crushing, screening, and washing.....do....	6	-	-	2	1	2	1	-	-	-	-
Crushed and Broken Granite Subindustry											
Establishments.....number..	150	44	13	28	42	18	4	1	-	-	-
All employees:											
Total.....do....	4,060	70	92	380	1,366	1,350	<u>802</u>	(D)	-	-	-
Payroll.....\$1,000..	19,826	329	448	1,692	6,451	6,462	<u>4,444</u>	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	3,449	63	79	312	1,235	1,115	<u>645</u>	(D)	-	-	-
Man-hours.....1,000..	7,894	137	179	670	2,770	2,635	<u>1,503</u>	(D)	-	-	-
Wages.....\$1,000..	16,010	305	386	1,374	5,538	4,947	<u>3,460</u>	(D)	-	-	-
Value added in mining.....do....	61,702	1,520	1,252	4,234	22,408	16,340	<u>15,948</u>	(D)	-	-	-
Value of shipments and receipts.....do....	89,749	2,105	1,851	5,860	30,403	24,709	<u>24,821</u>	(D)	-	-	-
Capital expenditures.....do....	7,185	190	147	801	2,105	2,677	<u>1,265</u>	(D)	-	-	-
Producing establishments, by type of operation, total.....number..	150	44	13	28	42	18	4	1	-	-	-
Quarries only:											
Open quarries.....do....	9	5	-	2	2	-	-	-	-	-	-
Underground quarries.....do....	1	1	-	-	-	-	-	-	-	-	-
Quarries with preparation plants:											
Open quarries with crushing only.....do....	38	28	3	1	5	1	-	-	-	-	-
Open quarries with screening only.....do....	1	-	1	-	-	-	-	-	-	-	-
Open quarries with all other preparation methods.....do....	99	10	9	25	34	16	4	1	-	-	-
Underground quarries with crushing, screening, and washing only.....do....	2	-	-	-	1	1	-	-	-	-	-
Crushed and Broken Stone, N.E.C., Subindustry											
Establishments.....number..	494	204	75	103	85	17	10	-	-	-	-
All employees:											
Total.....do....	<sup>1</sup> 8,081	327	501	1,447	2,596	1,159	1,457	-	-	-	-
Payroll.....\$1,000..	148,701	1,633	2,390	7,873	15,024	7,235	9,210	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	6,406	313	423	1,233	2,275	988	1,174	-	-	-	-
Man-hours.....1,000..	13,575	542	895	2,567	5,023	2,004	2,544	-	-	-	-
Wages.....\$1,000..	35,042	1,547	2,014	6,452	12,767	5,671	6,591	-	-	-	-
Value added in mining.....do....	111,503	5,261	5,974	18,807	35,154	17,993	28,314	-	-	-	-
Value of shipments and receipts.....do....	162,225	8,672	8,765	26,919	50,679	27,427	39,763	-	-	-	-
Capital expenditures.....do....	15,967	907	1,418	3,309	4,423	2,015	3,895	-	-	-	-

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963—Continued

Item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
Crushed and Broken Stone, N.E.C., Subindustry—Continued											
Producing establishments, by type of operation—Continued											
Quarries with preparation plants—Continued											
Open quarries with screening, but no crushing.....number..	7	2	1	4	-	-	-	-	-	-	-
Open quarries with washing, but no crushing and screening.....do....	1	1	-	-	-	-	-	-	-	-	-
Open quarries with other preparation methods only.....do....	1	1	-	-	-	-	-	-	-	-	-
Underground quarries with crushing plants.....do....	6	1	1	-	2	-	2	-	-	-	-
Combination open and underground quarries with crushing plants.....do....	2	1	-	-	1	-	-	-	-	-	-
Separately operated preparation plants:											
With crushing only.....do....	8	3	1	2	2	-	-	-	-	-	-
With screening only.....do....	1	-	-	1	-	-	-	-	-	-	-
With crushing and screening.....do....	6	1	3	2	-	-	-	-	-	-	-
With crushing, screening, and washing.....do....	6	-	2	1	2	1	-	-	-	-	-

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.

<sup>1</sup>Includes figures for employees at some separately reported central offices and related facilities. These were not distributed by size of establishment for subindustries: Crushed and Broken Limestone and Crushed and Broken Stone, N.E.C.

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts and Shipments of Primary Products: 1963 and 1958

(In thousands of dollars)

Ind. code	Industry and year	Value of shipments and receipts of establishments classified in the industry or subindustry					Value of shipments of primary products of the industry or subindustry shipped by establishments in all industries		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total (produced in all industries)	Produced in this industry or subindustry	Produced in other industries or subindustries
1411	Dimension stone industry.....1963..	19,735	18,525	656	32	522	25,630	18,525	7,105
	.....1958..	15,864	15,275	438	6	145	22,154	15,275	6,879
	Dimension limestone subindustry....1963..	3,513	3,266	16	-	231	6,275	3,266	3,009
	.....1958..	4,174	4,128	41	5	-	7,139	4,128	3,011
	Dimension granite subindustry.....1963..	9,428	8,779	416	-	233	9,815	8,779	1,036
	.....1958..	5,577	5,166	350	1	60	5,864	5,166	698
	Dimension stone, n.e.c., subindustry.1963..	6,794	6,475	229	32	58	9,540	6,475	3,065
	.....1958..	6,113	5,979	49	-	85	9,151	5,979	3,172
1421	Crushed and broken stone industry....1963..	794,860	748,244	28,443	8,083	10,090	905,195	739,193	216,002
	.....1958 <sup>2</sup> ..	616,076	583,039	18,466	2,988	11,583	731,642	580,851	215,079
	Crushed and broken limestone subindustry.....1963..	542,886	510,350	18,673	6,038	7,825	648,803	503,289	214,514
	.....1958 <sup>2</sup> ..	459,037	432,066	14,427	2,426	10,118	577,004	430,007	214,997
	Crushed and broken granite subindustry.....1963..	89,749	85,227	3,501	921	100	86,103	185,140	2963
	.....1958 <sup>2</sup> ..	49,596	48,467	767	157	205	49,961	148,467	21,494
	Crushed and broken stone, n.e.c., subindustry.....1963..	162,225	151,106	7,830	1,124	2,165	170,289	149,203	221,086
	.....1958 <sup>2</sup> ..	107,443	99,376	6,402	405	1,260	104,677	199,247	25,430

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>2</sup>Represents net shipments (gross shipments less the cost of stone received for preparation).<sup>3</sup>Includes the estimated value of crushed and broken stone produced and used in the same manufacturing establishment in the manufacture of cement, lime, and other manufactured products.<sup>4</sup>Excludes data for Alaska and Hawaii.

TABLE 6A. Primary Products Shipped by All Establishments Engaged in Mining, by Geographic Areas: 1963 and 1958

(Excludes figures for quarries operated by Federal, State, and local Governments)

Product and geographic area	Total shipments including interplant transfers			
	1963		1958	
	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
DIMENSION STONE				
United States:				
All dimension stone (net shipments), total <sup>1</sup> .....	3,484	91,649	2,957	80,559
Rough dimension stone:				
New shipments <sup>1</sup> .....	2,227	22,142	1,662	18,613
Gross shipments.....	2,356	25,630	1,780	22,154
Dressed dimension stone.....	1,257	69,507	1,295	61,946
Limestone (net shipments), total <sup>1</sup> .....	1,531	19,890	1,129	18,331
Rough dimension stone:				
Net shipments <sup>1</sup> .....	1,075	5,906	705	7,009
Gross shipments.....	1,095	6,275	718	7,139
Dressed dimension stone.....	456	13,984	424	11,322
Granite (net shipments), total <sup>1</sup> .....	923	35,636	807	29,827
Rough dimension stone:				
Net shipments <sup>1</sup> .....	489	8,239	333	3,711
Gross shipments.....	576	9,815	410	5,864
Dressed dimension stone.....	434	27,397	474	26,116
Miscellaneous stone (slate, marble, sandstone, trap rock, and miscellaneous stone), net shipments, total <sup>1</sup> .....	1,030	36,123	1,021	32,401
Rough dimension stone:				
Net shipments <sup>1</sup> .....	663	7,997	624	7,893
Gross shipments.....	685	9,540	652	9,151
Dressed dimension stone.....	367	28,126	397	24,508
New England:				
All dimension stone (net shipments), total <sup>1</sup> .....	390	20,587	530	18,040
Rough dimension stone (net shipments) <sup>1</sup> .....	185	3,983	169	1,192
Dressed dimension stone.....	205	16,604	361	16,848
Granite (net shipments), total <sup>1</sup> .....	276	11,828	423	11,123
Rough dimension stone (net shipments) <sup>1</sup> .....	163	3,874	149	1,074
Dressed dimension stone.....	113	7,954	274	10,049
Limestone and other stone (net shipments), total <sup>1</sup> .....	114	8,759	107	6,917
Rough dimension stone (net shipments) <sup>1</sup> .....	22	109	20	118
Dressed dimension stone.....	92	8,650	87	6,799
Vermont, all dimension stone (net shipments) <sup>1</sup> .....	219	12,248	337	11,114
Massachusetts, all dimension stone (net shipments) <sup>1</sup> .....	120	4,466	138	4,287
Middle Atlantic:				
All dimension stone (net shipments) <sup>1</sup> .....	319	7,172	436	7,165
Rough dimension stone (net shipments) <sup>1</sup> .....	224	2,288	308	2,793
Dressed dimension stone.....	95	4,884	128	4,372
New York, all dimension stone (net shipments) <sup>1</sup> .....	70	1,315	108	2,109
Pennsylvania:				
All dimension stone (net shipments) <sup>1</sup> .....	249	5,857	303	4,975
Rough dimension stone (net shipments) <sup>1</sup> .....	169	1,513	194	1,372
Dressed dimension stone.....	80	4,344	109	3,603
East North Central:				
All dimension stone (net shipments) <sup>1</sup> .....	1,113	20,651	990	19,852
Rough dimension stone (net shipments) <sup>1</sup> .....	669	6,012	566	7,174
Dressed dimension stone.....	444	14,639	424	12,678
Limestone (net shipments) <sup>1</sup> .....	887	13,969	767	13,403
Rough dimension stone (net shipments) <sup>1</sup> .....	531	4,016	435	5,182
Dressed dimension stone.....	356	9,953	332	8,221
Granite and other stone (net shipments) <sup>1</sup> .....	226	6,682	223	6,449
Rough dimension stone (net shipments) <sup>1</sup> .....	138	1,996	131	1,992
Dressed dimension stone.....	88	4,686	92	4,457
Ohio, all dimension stone (net shipments) <sup>1</sup> .....	118	4,026	115	3,588
Indiana:				
All dimension stone (net shipments) <sup>1</sup> .....	793	12,166	743	13,427
Rough dimension stone (net shipments) <sup>1</sup> .....	513	3,906	423	5,455
Dressed dimension stone.....	280	8,260	320	7,972
Wisconsin, all dimension stone (net shipments) <sup>1</sup> .....	162	3,793	97	2,393
West North Central:				
All dimension stone (net shipments) <sup>1</sup> .....	219	12,044	190	12,911
Limestone (net shipments) <sup>1</sup> .....	118	2,351	126	2,051
Granite (net shipments) <sup>1</sup> .....	61	6,053	44	8,417
Other (net shipments) <sup>1</sup> .....	40	3,640	20	2,443

See footnotes at end of table.

TABLE 6A. Primary Products Shipped by All Establishments Engaged in Mining, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	Total shipments including interplant transfers			
	1963		1958	
	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
DIMENSION STONE—Continued				
West North Central—Continued				
Minnesota, all dimension stone (net shipments) <sup>1</sup> .....	73	5,266	71	7,793
South Dakota, all dimension stone (net shipments) <sup>1</sup> .....	38	1,986	15	1,799
South Atlantic:				
All dimension stone (net shipments) <sup>1</sup> .....	472	14,869	370	9,786
Rough dimension stone (net shipments) <sup>2</sup> .....	194	2,783	198	2,872
Dressed dimension stone.....	278	12,086	172	6,914
Granite (net shipments) <sup>1</sup> .....	308	10,615	245	5,911
Limestone and other stone (net shipments) <sup>1</sup> .....	165	4,255	125	3,875
Virginia, all dimension stone (net shipments) <sup>1</sup> .....	38	1,590	(NA)	(NA)
North Carolina, all dimension stone (net shipments) <sup>1</sup> .....	33	2,162	89	2,185
Georgia, all dimension stone (net shipments) <sup>1</sup> .....	338	10,352	223	6,352
East South Central:				
All dimension stone (net shipments) <sup>1</sup> .....	126	6,209	164	6,710
Rough dimension stone (net shipments) <sup>2</sup> .....	74	1,291	125	2,120
Dressed dimension stone.....	52	4,918	39	4,590
Tennessee, all dimension stone (net shipments) <sup>1</sup> .....	87	3,567	125	5,155
West South Central:				
All dimension stone (net shipments) <sup>1</sup> .....	596	5,339	123	3,257
Granite (net shipments) <sup>1</sup> .....	185	3,293	37	2,173
Limestone and other stone (net shipments) <sup>1</sup> .....	411	2,046	86	1,084
Texas, all dimension stone (net shipments) <sup>1</sup> .....	545	4,009	66	2,183
Mountain, all dimension stone (net shipments) <sup>1</sup> .....	57	1,398	70	900
Pacific:				
All dimension stone (net shipments) <sup>1</sup> .....	192	3,380	84	1,938
California, all dimension stone (net shipments) <sup>1</sup> .....	121	2,610	53	1,424

Product and geographic area	1963						1958					
	Net production	Produced and used in the same establishment in the manufacture of—			Net shipments including interplant transfers <sup>2</sup>		Net total produced and used or shipped	Produced and used in the same establishment in the manufacture of—		Net shipments including interplant transfers <sup>2</sup>		
		Hydraulic cement	Quicklime and hydrated lime <sup>3</sup>	Ready-mixed concrete and asphalt and tar paving mixtures and block	Quantity	Value		Hydraulic cement	Quicklime and hydrated lime <sup>3</sup>	Quantity	Value	
	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(\$1,000)	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(\$1,000)	
CRUSHED AND BROKEN STONE												
United States:												
Crushed and broken stone, total.....	603,693	73,796	11,670	5,740	504,363	791,009	484,592	65,871	12,986	405,240	616,649	
Limestone.....	471,375	73,585	11,670	4,168	376,256	536,996	<sup>4</sup> 388,360	65,674	412,986	<sup>4</sup> 309,491	<sup>4</sup> 459,564	
Granite.....	49,629	-	-	-	49,213	86,103	<sup>4</sup> 83,812	-	-	<sup>4</sup> 33,812	<sup>4</sup> 49,961	
Miscellaneous stone (slate, marble, sand- stone, trap rock, and other stone).....	82,689	211	-	1,572	78,894	167,910	<sup>5</sup> 62,420	197	-	61,937	107,124	
New England:												
Crushed and broken stone, total.....	14,046	(D)	(D)	937	11,823	22,033	<sup>5</sup> 9,927	(D)	(D)	8,598	17,864	
Limestone.....	4,284	(D)	(D)	(D)	3,148	5,941	1,893	(D)	(D)	(D)	2,386	
Granite.....	1,374	-	-	-	1,110	2,098	1,152	-	-	1,152	2,037	
Miscellaneous stone.....	8,388	-	-	(D)	7,565	13,994	<sup>5</sup> 6,882	-	-	(D)	13,441	
Maine, crushed and broken stone.....	950	(D)	-	-	444	1,133	968	(D)	(D)	(D)	1,005	
New Hampshire and Rhode Island, crushed and broken stone.....	515	-	-	-	514	1,043	<sup>5</sup> 197	-	-	<sup>5</sup> 197	483	
Vermont, crushed and broken stone.....	1,123	-	-	-	1,048	2,254	416	-	(D)	(D)	3,367	
Massachusetts:												
Crushed and broken stone, total.....	6,282	-	(D)	511	5,149	9,059	<sup>5</sup> 3,636	-	404	<sup>5</sup> 3,232	6,148	
Limestone.....	1,696	-	(D)	(D)	1,126	1,738	792	-	404	388	1,019	
Granite.....	1,054	-	-	-	870	1,731	672	-	-	672	1,287	
Miscellaneous stone.....	3,532	-	-	(D)	3,153	5,590	<sup>5</sup> 2,171	-	-	<sup>5</sup> 2,172	3,842	

See footnotes at end of table.



TABLE 6A. Primary Products Shipped by All Establishments Engaged in Mining, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	1963						1958					
	Net production	Produced and used in the same establishment in the manufacture of—			Net shipments including interplant transfers <sup>2</sup>		Net total produced and used or shipped	Produced and used in the same establishment in the manufacture of—		Net shipments including interplant transfers <sup>2</sup>		
		Hydraulic cement	Quicklime and hydrated lime <sup>3</sup>	Ready-mixed concrete and asphalt and tar paving mixtures and block	Quantity	Value		Hydraulic cement	Quicklime and hydrated lime <sup>3</sup>	Quantity	Value	
												(1,000 short tons)
	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(\$1,000)	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(\$1,000)	
CRUSHED AND BROKEN STONE—Continued												
New England—Continued												
Connecticut:												
Crushed and broken stone, total.....	5,176	-	(D)	(D)	4,668	8,544	4,710	-	(D)	(D)	6,861	
Limestone and granite.....	813	-	(D)	-	748	1,770	569	-	(D)	(D)	1,006	
Miscellaneous stone.....	4,363	-	-	(D)	3,920	6,774	4,141	-	-	4,141	5,855	
Middle Atlantic:												
Crushed and broken stone, total.....	91,046	11,761	1,796	182	75,923	147,804	577,822	(D)	(D)	563,287	124,132	
Limestone.....	65,347	(D)	1,796	56	51,829	91,550	63,331	(D)	(D)	48,832	89,020	
Granite.....	1,397	-	-	-	1,202	2,221	484	-	-	484	1,216	
Miscellaneous stone.....	24,342	(D)	-	126	22,892	54,033	514,007	536	-	513,971	33,896	
New York:												
Crushed and broken stone, total.....	26,615	3,017	(D)	(D)	23,042	44,256	524,760	(D)	(D)	520,658	41,667	
Limestone.....	21,961	3,017	(D)	(D)	19,175	33,955	22,072	(D)	(D)	17,970	34,887	
Granite and miscellaneous stone.....	4,654	-	-	(D)	3,867	10,301	52,688	-	-	52,688	6,780	
New Jersey, crushed and broken stone.....												
	14,107	-	-	(D)	13,187	34,643	7,443	-	-	7,443	18,402	
Pennsylvania:												
Crushed and broken stone, total.....	50,324	8,744	(D)	61	39,694	68,905	545,619	8,619	1,677	35,184	64,063	
Limestone.....	41,404	8,744	(D)	61	31,200	52,194	540,646	58,722	1,677	30,247	51,210	
Granite and miscellaneous stone.....	8,920	-	-	-	8,494	16,711	54,973	536	-	4,937	12,853	
East North Central:												
Crushed and broken stone, total.....	143,529	13,554	3,091	1,019	122,497	170,422	122,007	10,973	3,838	107,196	147,497	
Limestone.....	140,758	(D)	3,091	(D)	119,723	155,545	7117,370	710,973	3,838	102,559	137,900	
Granite and miscellaneous stone.....	2,771	(D)	-	(D)	2,774	14,877	74,637	(?)	-	4,637	9,597	
Ohio:												
Crushed and broken stone.....	40,506	3,818	2,704	(D)	33,186	47,515	35,219	3,886	3,688	27,645	42,768	
Limestone.....	39,664	(D)	2,704	(D)	32,343	45,735	734,414	73,886	3,688	26,870	39,277	
Indiana, crushed and broken stone.....												
	19,692	2,697	(D)	(D)	16,256	21,747	14,247	1,662	-	12,585	17,112	
Illinois:												
Crushed and broken stone.....	40,502	2,837	142	723	35,590	49,703	35,135	(D)	(D)	32,439	48,969	
Limestone.....	40,502	2,837	142	723	35,590	49,703	34,813	(D)	(D)	32,117	48,495	
Michigan, crushed and broken stone.....												
	30,795	4,202	-	(D)	25,658	27,467	25,341	(D)	-	(D)	22,822	
Wisconsin:												
Crushed and broken stone, total.....	12,034	-	(D)	-	11,807	23,990	12,065	-	(D)	(D)	15,826	
Limestone.....	10,149	-	(D)	-	9,917	11,023	9,277	-	(D)	(D)	11,464	
Granite and miscellaneous stone.....	1,885	-	-	-	1,890	12,967	2,788	-	-	2,788	4,362	
West North Central:												
Crushed and broken stone, total.....	70,614	8,902	(D)	(D)	59,200	86,472	67,109	8,837	2,535	55,737	80,107	
Limestone.....	67,371	8,902	(D)	(D)	56,045	81,519	763,747	78,837	2,535	52,375	75,248	
Granite and miscellaneous stone.....	3,243	-	-	-	3,155	4,953	73,362	(?)	-	3,362	4,859	
Minnesota:												
Crushed and broken stone.....	4,320	-	-	-	4,103	5,632	4,355	-	-	4,355	6,731	
Limestone.....	3,180	-	-	-	3,058	4,212	3,806	-	-	3,806	5,700	
Iowa, crushed and broken stone.....												
	20,265	2,187	(D)	-	18,448	25,146	21,706	2,123	-	19,583	27,399	
Limestone.....	20,118	2,187	(D)	-	18,251	24,946	(NA)	(NA)	(NA)	(NA)	(NA)	
Missouri:												
Crushed and broken stone.....	29,224	3,237	(D)	(D)	23,538	35,781	24,554	(D)	(D)	18,980	27,755	
Limestone.....	28,181	3,237	(D)	(D)	22,513	34,039	23,864	(D)	(D)	18,094	26,855	
North Dakota and South Dakota, crushed and broken stone.....												
	1,208	-	(D)	-	1,165	2,074	1,635	-	(D)	(D)	2,439	
Nebraska:												
Crushed and broken stone.....	4,114	(D)	-	-	2,924	4,822	3,508	(D)	-	(D)	3,851	
Limestone.....	4,114	(D)	-	-	2,924	4,822	3,503	(D)	-	(D)	3,840	
Kansas:												
Crushed and broken stone.....	11,483	(D)	-	(D)	9,022	13,017	11,351	2,534	-	8,817	11,932	
Limestone.....	11,027	(D)	-	(D)	8,579	12,088	711,009	72,534	-	8,475	11,242	

See footnotes at end of table.

TABLE 6A. Primary Products Shipped by All Establishments Engaged in Mining, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	1963						1958				
	Net production	Produced and used in the same establishment in the manufacture of—			Net shipments including interplant transfers <sup>2</sup>		Net total produced and used or shipped	Produced and used in the same establishment in the manufacture of—		Net shipments including interplant transfers <sup>2</sup>	
		Hydraulic cement	Quicklime and hydrated lime <sup>3</sup>	Ready-mixed concrete and asphalt and tar paving mixtures and block	Quantity	Value		Hydraulic cement	Quicklime and hydrated lime <sup>3</sup>	Quantity	Value
	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(\$1,000)	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(\$1,000)
CRUSHED AND BROKEN STONE—Continued											
South Atlantic:											
Crushed and broken stone, total.....	114,354	(D)	1,189	1,634	103,563	168,083	<sup>5</sup> 77,872	5,977	910	<sup>5</sup> 70,985	117,187
Limestone.....	63,633	(D)	1,189	(D)	52,404	78,551	46,697	5,919	910	39,868	62,820
Granite.....	36,420	-	-	-	37,031	55,190	<sup>5</sup> 23,482	-	-	<sup>5</sup> 23,482	35,741
Miscellaneous stone.....	14,301	(D)	-	38	14,128	34,342	7,693	58	-	7,635	18,626
Delaware and Maryland:											
Crushed and broken stone.....	12,268	1,699	(D)	(D)	10,512	19,373	7,408	(D)	(D)	6,205	12,561
Limestone.....	6,582	(D)	(D)	(D)	4,894	8,699	6,136	(D)	(D)	4,884	9,963
Virginia:											
Crushed and broken stone, total.....	26,714	(D)	964	(D)	24,194	39,270	<sup>5</sup> 14,738	(D)	(D)	12,323	21,212
Limestone.....	16,546	(D)	964	(D)	14,068	20,147	10,571	(D)	(D)	(D)	14,263
Granite.....	6,442	-	-	-	6,504	10,067	<sup>5</sup> 2,944	-	-	(D)	4,670
Miscellaneous stone.....	3,726	-	-	(D)	3,622	9,056	1,223	-	-	1,223	2,279
West Virginia:											
Crushed and broken stone.....	6,739	(D)	(D)	-	5,526	10,139	5,228	(D)	-	(D)	9,074
Limestone.....	6,253	(D)	(D)	-	5,040	8,944	5,052	(D)	-	(D)	8,692
North Carolina:											
Crushed and broken stone, total.....	14,014	(D)	-	-	14,599	24,197	11,505	-	-	11,505	16,436
Limestone and granite.....	11,111	(D)	-	-	11,619	18,171	10,155	-	-	10,155	14,755
Miscellaneous stone.....	2,903	-	-	-	2,980	6,026	1,350	-	-	1,350	1,681
South Carolina:											
Crushed and broken stone.....	8,577	(D)	-	-	7,749	11,693	4,869	(D)	-	(D)	6,722
Granite.....	7,186	-	-	-	7,058	10,020	4,084	-	-	4,084	6,283
Georgia:											
Crushed and broken stone, total.....	18,413	(D)	-	-	18,096	33,939	12,453	(D)	-	(D)	25,118
Limestone.....	2,656	(D)	-	-	2,078	5,069	1,724	(D)	-	(D)	3,852
Granite.....	13,510	-	-	-	13,829	19,888	8,445	-	-	8,445	12,961
Miscellaneous stone.....	2,247	(D)	-	-	2,189	8,982	2,284	(D)	-	(NA)	8,305
Florida, crushed and broken stone (all limestone in 1963).....	27,629	(D)	-	1,470	22,887	29,472	21,611	(D)	-	(D)	26,064
East South Central:											
Crushed and broken stone, total.....	63,785	4,696	742	(D)	56,818	78,891	44,444	4,404	1,168	38,872	53,802
Limestone.....	63,236	4,696	742	(D)	56,284	75,914	43,539	4,404	1,168	37,957	52,089
Granite (1958 only) and miscellaneous stone.....	549	-	-	-	534	2,977	915	(7)	-	915	1,713
Kentucky:											
Crushed and broken stone.....	24,089	-	-	(D)	24,257	34,624	15,385	-	-	15,385	21,057
Limestone.....	24,089	-	-	(D)	24,257	34,624	15,279	-	-	15,279	20,873
Tennessee, crushed and broken stone.....	24,931	(D)	204	-	21,219	27,804	17,474	(D)	(D)	15,605	21,033
Alabama and Mississippi, crushed and broken stone.....	14,765	2,930	538	-	11,342	16,463	11,585	(D)	(D)	7,882	11,712
West South Central:											
Crushed and broken stone, total.....	46,894	8,745	1,135	1,244	35,545	50,941	31,540	6,754	1,121	23,665	29,359
Limestone.....	37,554	8,745	1,135	1,244	26,797	29,748	26,005	6,754	1,121	18,730	23,135
Granite and miscellaneous stone.....	9,340	-	-	-	8,748	21,193	4,935	(7)	-	4,935	6,224
Arkansas and Louisiana, crushed and broken stone	10,406	1,398	(D)	-	8,457	21,360	5,188	(D)	(D)	(D)	5,300
Oklahoma:											
Crushed and broken stone.....	12,776	1,715	-	-	10,987	11,292	9,041	(D)	-	(D)	8,552
Limestone.....	10,591	1,715	-	-	8,807	9,213	8,007	(D)	-	(D)	8,035
Texas:											
Crushed and broken stone, total.....	23,712	5,631	(D)	1,244	16,101	18,289	17,311	(D)	(D)	11,318	15,507
Limestone.....	22,515	5,631	(D)	1,244	14,988	16,349	16,067	(D)	(D)	10,074	13,066
Granite and miscellaneous stone.....	1,197	-	-	-	1,113	1,940	1,244	-	-	1,244	2,441
Mountain:											
Crushed and broken stone, total.....	11,786	4,968	807	230	5,643	11,678	<sup>5</sup> 18,901	<sup>5</sup> 3,779	531	14,591	13,549
Limestone.....	8,744	(D)	807	30	2,898	6,658	7,164	3,727	531	2,906	6,012
Granite.....	648	-	-	-	623	903	102	-	-	102	247
Miscellaneous stone.....	2,394	(D)	-	200	2,122	4,117	<sup>5</sup> 11,635	<sup>5</sup> 52	-	11,583	7,290

See footnotes at end of table.

TABLE 6A. Primary Products Shipped by All Establishments Engaged in Mining, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	1963						1958					
	Net production	Produced and used in the same establishment in the manufacture of—			Net shipments including interplant transfers <sup>2</sup>		Net total produced and used or shipped	Produced and used in the same establishment in the manufacture of—		Net shipments including interplant transfers <sup>2</sup>		
		Hydraulic cement	Quicklime and hydrated lime <sup>3</sup>	Ready-mixed concrete and asphalt and tar paving mixtures and block	Quantity	Value		Hydraulic cement	Quicklime and hydrated lime <sup>3</sup>	Quantity	Value	
												(1,000 short tons)
	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(\$1,000)	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(1,000 short tons)	(\$1,000)	
CRUSHED AND BROKEN STONE—Continued												
Mountain—Continued												
Montana, crushed and broken stone.....	1,121	(D)	(D)	-	545	793	889	(D)	(D)	(D)	(D)	
Idaho, crushed and broken stone.....	568	(D)	-	-	385	621	887	(D)	-	(D)	874	
Wyoming, crushed and broken stone.....	1,439	(D)	-	-	1,144	1,857	599	(D)	-	(D)	864	
Colorado:												
Crushed and broken stone.....	2,467	(D)	-	-	996	2,099	<sup>a</sup> 2,774	(D)	-	(D)	2,390	
Limestone.....	2,237	(D)	-	-	795	1,552	2,729	(D)	-	(D)	2,285	
New Mexico, crushed and broken stone.....	1,196	(D)	(D)	30	528	874	<sup>a</sup> 37	-	(D)	(D)	771	
Arizona:												
Crushed and broken stone.....	2,390	(D)	154	-	941	2,432	1,206	(D)	(D)	318	805	
Limestone.....	1,766	(D)	154	-	331	898	1,070	(D)	(D)	182	595	
Utah, crushed and broken stone.....	1,802	(D)	(D)	-	916	2,516	11,049	(D)	(D)	(D)	(D)	
Nevada, crushed and broken stone.....	803	-	(D)	200	188	486	860	-	(D)	(D)	751	
Pacific:												
Crushed and broken stone, total.....	47,639	12,892	433	322	33,351	54,685	34,970	12,070	<sup>a</sup> 461	<sup>a</sup> 21,986	33,152	
Limestone.....	20,448	(D)	433	(D)	7,128	11,570	<sup>a</sup> 17,071	12,070	<sup>a</sup> 461	<sup>a</sup> 4,540	<sup>a</sup> 8,093	
Granite.....	5,379	-	-	-	5,371	10,698	<sup>a</sup> 4,520	-	-	<sup>a</sup> 4,520	<sup>a</sup> 6,114	
Miscellaneous stone.....	21,812	(D)	-	321	20,852	32,417	12,926	-	-	12,926	18,262	
Washington:												
Crushed and broken stone, total.....	4,502	1,199	-	(D)	3,321	5,575	3,827	(D)	-	(D)	4,408	
Limestone.....	1,708	-	-	-	517	1,077	1,595	(D)	-	(D)	1,626	
Granite and miscellaneous stone.....	2,794	1,199	-	(D)	2,804	4,498	2,232	-	-	2,232	2,782	
Oregon:												
Crushed and broken stone, total.....	6,121	(D)	(D)	164	5,285	8,196	3,711	(D)	-	(D)	4,489	
Limestone.....	1,049	(D)	(D)	-	835	1,107	1,539	(D)	-	(D)	1,316	
Granite and miscellaneous stone.....	5,072	-	-	164	4,450	7,089	2,172	-	-	2,172	3,173	
California:												
Crushed and broken stone, total.....	34,033	11,022	(D)	108	22,543	36,119	25,256	11,020	461	13,765	20,222	
Limestone.....	17,022	11,022	(D)	-	5,615	9,033	13,937	11,020	461	2,456	5,151	
Granite.....	5,245	-	-	-	5,237	10,401	3,966	-	-	3,966	5,401	
Miscellaneous stone.....	11,762	-	-	108	11,691	16,685	7,343	-	-	7,343	9,670	
Alaska and Hawaii, total.....	2,983	(D)	-	2	2,202	4,795	2,186	-	(D)	(D)	4,033	
Limestone and granite.....	665	(D)	-	1	161	353	453	-	(D)	(D)	<sup>a</sup> 683	
Miscellaneous stone.....	2,318	-	-	1	2,041	4,442	1,733	-	-	1,733	3,350	

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Represents gross shipments, including interplant transfers, less rough stone received from other establishments for dressing at dressing plants operated in conjunction with a quarry.

<sup>2</sup>Represents gross shipments, including interplant transfers, less broken stone received from other establishments for crushing, screening, or washing. For 1963, stone reported received for crushing, screening, or washing in the United States as a whole was: for all stone, 10,591 thousand tons, costing \$9,051 thousand; for limestone, 8,604 thousand tons, costing \$7,061 thousand; and for granite and miscellaneous stone, 1,987 thousand tons, costing \$1,990 thousand.

<sup>3</sup>Excludes data for quarries producing stone for lime manufacture where these activities are reported as parts of chemical establishments.

<sup>4</sup>Figures for granite in Alaska are included with figures for limestone. The quantity of limestone produced and used in the same establishment in making lime in Hawaii is excluded from the figures shown for stone used in making lime and included with shipments. The estimated value of such stone is included in the value of shipments.

<sup>5</sup>Includes some stone mined and used in the same establishment in making such products as asphalt and tar paving mixtures, nonclay refractories, and ready-mixed concrete. For the United States as a whole such used amounted to 495 thousand tons, and in the United States total, the figures for such granite are included with those for such miscellaneous stone.

<sup>6</sup>Excludes granite produced and used in the same establishment. This is combined with the figures for miscellaneous stone.

<sup>7</sup>The figures for limestone include, figures for granite and miscellaneous stone exclude, less than 40 thousand tons of stone other than limestone used in making cement.

<sup>8</sup>Excludes figures for limestone and granite in Alaska and Hawaii.

<sup>9</sup>Includes the estimated value of stone produced and used in the same establishment in making lime.

TABLE 6B. **Product Classes—Indexes of Production and Unit Value for Primary Products Shipped by All Producers: 1963 and 1958**

Product code	Product and year	Indexes (1954 = 100)	
		Production	Unit value
1411	Rough dimension stone.....1963..	114	79
	.....1958..	88	89
	Rough dimension limestone.....1963..	125	69
	.....1958..	82	120
	Rough dimension granite.....1963..	107	88
	.....1958..	76	74
	Rough dimension stone, n.e.c.....1963..	108	82
	.....1958..	103	83
	Crushed and broken stone.....1963..	163	102
	.....1958..	131	100
1421	Crushed and broken limestone.....1963..	156	101
	.....1958..	128	105
	Crushed and broken granite.....1963..	218	125
	.....1958..	148	106
	Crushed and broken stone, n.e.c.....1963..	184	93
	.....1958..	139	76

n.e.c. not elsewhere classified.

TABLE 6C. Shipments of Primary Products Distributed by Value Per Ton: 1963

Product and average value per ton f.o.b. quarry or plant <sup>1</sup>	Gross quantity shipped		Value of gross shipments		Product and average value per ton f.o.b. quarry or plant <sup>1</sup>	Gross quantity shipped		Value of gross shipments	
	Short tons (1,000)	Percent of total quantity	Value (\$1,000)	Percent of total value		Short tons (1,000)	Percent of total quantity	Value (\$1,000)	Percent of total value
DIMENSION STONE					CRUSHED AND BROKEN STONE—Continued				
Rough dimension limestone, total.....	1,095	100.0	6,275	100.0	Crushed and broken limestone—Continued				
Less than \$2.29.....	463	42.3	671	10.7	\$1.12 to \$1.25.....	45,147	11.7	53,861	9.9
\$2.60 to \$3.79.....	110	10.0	304	4.9	\$1.26 to \$1.41.....	91,381	23.7	120,969	22.2
\$3.80 to \$5.44.....	41	3.7	171	2.7	\$1.42 to \$1.59.....	64,562	16.8	96,144	17.7
\$5.45 to \$6.94.....	4	0.4	26	0.4	\$1.60 to \$1.79.....	39,228	10.2	65,444	12.0
\$6.95 to \$9.99.....	304	27.8	2,321	37.0	\$1.80 to \$2.04.....	20,737	5.4	40,045	7.4
\$10.00 to \$11.10.....	48	4.3	483	7.7	\$2.05 to \$2.29.....	10,493	2.7	22,540	4.1
\$11.11 to \$12.50.....	5	0.5	59	0.9	\$2.30 to \$2.59.....	6,763	1.8	16,344	3.0
\$12.51 to \$17.90.....	67	6.1	948	15.1	\$2.60 to \$2.94.....	4,141	1.1	11,191	2.1
\$17.91 to \$20.40.....	4	0.4	76	1.2	\$2.95 to \$3.34.....	482	0.1	1,479	0.3
\$20.41 to \$29.40.....	47	4.3	1,149	18.3	\$3.35 to \$3.79.....	1,426	0.4	5,058	0.9
\$29.41 and over.....	2	0.2	67	1.1	\$3.80 to \$4.29.....	843	0.2	3,381	0.6
Rough dimension granite, total.....	576	100.0	9,815	100.0	\$4.30 to \$4.84.....	679	0.2	3,050	0.6
\$2.95 to \$9.99.....	216	37.5	978	9.9	\$4.85 to \$6.14.....	387	0.1	2,012	0.4
\$10.00 to \$15.90.....	91	15.8	1,223	12.5	\$6.15 to \$9.99.....	842	0.2	5,831	1.1
\$15.91 to \$20.40.....	107	18.6	2,008	20.5	\$10.00 and over.....	175	0.1	6,077	1.1
\$20.41 to \$33.40.....	90	15.6	2,162	22.0	Crushed and broken granite, total.....	<sup>2</sup> 49,213	100.0	<sup>2</sup> 86,103	100.0
\$33.41 to \$42.90.....	52	9.0	1,942	19.8	Less than \$0.62.....	621	1.3	261	0.3
\$42.91 to \$61.40.....	8	1.4	383	3.9	\$0.62 to \$0.99.....	866	1.8	722	0.8
\$61.41 to \$141.00.....	12	2.1	1,119	11.4	\$1.00 to \$1.25.....	7,487	15.2	8,774	10.2
Rough dimension stone, n.e.c., total.....	685	100.0	9,540	100.0	\$1.26 to \$1.41.....	13,014	26.4	17,415	20.2
Less than \$2.05.....	12	1.8	19	0.2	\$1.42 to \$1.59.....	16,757	34.0	25,540	29.7
\$2.30 to \$4.29.....	50	7.3	163	1.7	\$1.60 to \$1.79.....	4,370	8.9	7,285	8.5
\$4.30 to \$5.44.....	40	5.8	206	2.2	\$1.80 to \$2.04.....	2,207	4.5	4,378	5.1
\$5.45 to \$6.94.....	22	3.2	128	1.3	\$2.05 and over.....	3,892	7.9	21,728	25.2
\$6.95 to \$7.84.....	131	19.1	979	10.3	Crushed and broken stone, n.e.c., total....	<sup>2</sup> 78,894	100.0	<sup>2</sup> 167,910	100.0
\$7.85 to \$9.99.....	29	4.2	257	2.7	Less than \$0.62.....	2,247	2.8	1,104	0.7
\$10.00 to \$12.50.....	82	12.0	881	9.2	\$0.62 to \$0.78.....	1,690	2.1	1,185	0.7
\$12.51 to \$15.90.....	194	28.3	2,744	28.8	\$0.79 to \$0.99.....	4,182	5.3	3,782	2.3
\$15.91 to \$17.90.....	23	3.4	388	4.1	\$1.00 to \$1.11.....	1,983	2.5	2,201	1.3
\$17.91 to \$20.40.....	4	0.6	86	0.9	\$1.12 to \$1.25.....	6,523	8.3	7,719	4.6
\$20.41 to \$22.90.....	15	2.2	310	3.2	\$1.26 to \$1.41.....	8,379	10.6	11,570	6.9
\$22.91 to \$25.90.....	27	3.9	631	6.6	\$1.42 to \$1.59.....	11,667	14.9	17,713	10.5
\$25.91 to \$29.40.....	3	0.4	87	0.9	\$1.60 to \$1.79.....	12,160	15.4	20,352	12.1
\$29.41 to \$37.90.....	26	3.8	889	9.3	\$1.80 to \$2.04.....	8,972	11.4	17,984	10.7
\$37.91 to \$42.90.....	6	0.9	249	2.6	\$2.05 to \$2.29.....	5,630	7.1	12,048	7.2
\$42.91 to \$69.40.....	15	2.2	916	9.6	\$2.30 to \$2.59.....	8,878	11.3	21,147	12.6
\$69.41 and over.....	6	0.9	607	6.4	\$2.60 to \$2.94.....	1,801	2.3	5,036	3.0
CRUSHED AND BROKEN STONE					\$2.95 to \$3.34.....	692	0.9	2,161	1.3
Crushed and broken limestone, total.....	384,860	100.0	544,057	100.0	\$3.35 to \$3.79.....	196	0.2	675	0.4
Less than \$0.62.....	5,083	1.3	2,714	0.5	\$3.80 to \$4.29.....	295	0.4	1,162	0.7
\$0.62 to \$0.78.....	4,946	1.3	3,553	0.6	\$4.30 to \$5.44.....	305	0.4	1,520	0.9
\$0.79 to \$0.99.....	49,475	12.8	44,354	8.1	\$5.45 to \$6.94.....	1,534	1.9	9,175	5.5
\$1.00 to \$1.11.....	38,070	9.9	40,000	7.4	\$6.95 to \$9.99.....	620	0.8	4,989	3.0
					\$10.00 to \$15.90.....	175	0.2	2,404	1.4
					\$15.91 to \$37.90.....	959	1.2	22,765	13.5
					\$37.90 and over.....	6	0.0	1,218	0.7

n.e.c. Not elsewhere classified.

<sup>1</sup>The "average values" are based on the entire shipments of the specified product by each establishment. Thus they are representative of varied average prices among establishments but not of variations within an establishment.<sup>2</sup>Represents net shipments.

TABLE 7A. Supplies Used: 1963 and 1958

(Detailed figures for the quantity and cost of supplies used were not obtained for these industries. For the total cost of supplies used and the quantity and total cost of purchased fuels and electric energy used, see tables 3A and 3B. For the quantity and cost of stone received for preparation, see table 6A.)

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954

Industry, geographic area, and type of operation	Aggregate horsepower per production worker		1963 (1,000 hp.)									
			Aggregate horsepower (prime movers and electric motors driven by purchased energy)						Prime movers (horsepower)			
			Total	By type of equipment			Total	By type of equipment			All other equipment	
	Loading equipment	Transportation equipment		All other equipment	Loading equipment	Transportation equipment						
1963		1954	Highway type			Other	Highway type	Other				
1411.—Dimension stone industry, total.....	40	31	79	22	24	7	26	56	13	24	7	12
Dimension limestone subindustry.....	63	37	18	5	5	1	7	13	4	5	1	3
Dimension granite subindustry.....	36	33	28	9	8	1	10	18	4	8	1	5
Dimension stone, n.e.c., subindustry.....	36	28	33	8	11	5	9	25	5	11	5	4
1421.—Crushed and broken stone industry, total.....	118	84	4,269	844	1,020	787	1,618	2,907	669	1,020	709	509
New England.....	115	(NA)	80	18	25	9	28	52	14	25	8	5
Massachusetts.....	98	(NA)	30	6	10	1	13	17	4	10	1	2
Connecticut.....	155	(NA)	32	7	8	5	12	22	6	8	5	3
Middle Atlantic, total.....	126	(NA)	723	143	169	108	303	439	111	169	99	60
New York.....	118	(NA)	199	35	55	33	76	127	28	55	33	11
New Jersey.....	81	(NA)	85	14	19	8	44	44	10	19	7	8
Pennsylvania.....	146	(NA)	439	94	95	67	183	268	73	95	59	41
East North Central, total.....	123	(NA)	943	187	179	231	346	622	131	179	208	104
Ohio.....	107	(NA)	240	57	50	45	88	146	40	50	42	14
Indiana.....	147	(NA)	159	32	24	33	70	107	31	24	31	21
Illinois.....	127	(NA)	261	53	34	76	98	191	42	34	74	41
Michigan.....	123	(NA)	138	23	17	57	41	73	6	17	47	3
Wisconsin.....	126	(NA)	145	22	54	20	49	105	12	54	14	25
West North Central.....	136	(NA)	656	126	190	108	232	544	118	190	93	143
Minnesota.....	115	(NA)	37	6	10	5	16	28	5	10	5	8
Iowa.....	147	(NA)	194	40	52	41	61	163	39	52	30	42
Missouri.....	115	(NA)	245	51	68	28	98	197	45	68	27	57
Nebraska.....	143	(NA)	37	5	13	5	14	30	5	13	5	7
Kansas.....	178	(NA)	129	22	42	26	39	114	22	42	24	26
South Atlantic, total.....	108	(NA)	838	162	183	161	332	551	127	183	149	92
Delaware and Maryland.....	113	(NA)	69	15	15	18	21	51	14	15	16	6
Virginia.....	118	(NA)	237	42	69	42	84	164	35	69	36	24
West Virginia.....	111	(NA)	55	9	9	14	23	36	6	9	13	8
North Carolina.....	149	(NA)	143	29	23	28	63	83	21	23	28	11
South Carolina.....	110	(NA)	70	14	9	17	30	49	13	9	16	11
Georgia.....	82	(NA)	130	22	25	19	64	77	21	25	19	12
Florida.....	92	(NA)	134	31	33	23	47	91	17	33	21	20
East South Central, total.....	112	(NA)	452	93	107	78	174	278	65	107	69	37
Kentucky.....	123	(NA)	230	47	58	41	84	142	30	58	35	19
Tennessee.....	114	(NA)	149	38	35	23	53	97	29	35	22	11
Alabama.....	83	(NA)	73	8	14	14	37	39	6	14	12	7
West South Central, total.....	95	(NA)	248	61	53	50	84	174	55	53	42	24
Arkansas and Louisiana.....	65	(NA)	52	9	6	9	28	28	6	6	9	7
Oklahoma.....	80	(NA)	51	8	16	11	16	32	6	16	5	5
Texas.....	124	(NA)	145	44	31	30	40	114	43	31	28	12
Mountain.....	115	(NA)	64	7	28	11	18	53	6	28	11	8
Pacific, total.....	115	(NA)	265	47	86	31	101	194	42	86	30	36
Washington.....	167	(NA)	43	4	15	4	20	34	4	15	4	11
Oregon.....	108	(NA)	54	10	17	5	22	40	8	17	5	10
California.....	103	(NA)	131	25	33	19	54	87	22	33	18	14
Alaska and Hawaii.....	142	(NA)	37	8	21	3	5	33	8	21	3	1
Crushed and Broken Limestone Subindustry												
United States, total.....	122	88	3,219	644	759	641	1,175	2,237	501	759	572	405
Geographic Area												
Middle Atlantic, total.....	139	82	525	105	123	82	215	328	80	123	79	46
New York.....	119	(NA)	163	26	50	26	61	107	21	50	26	10
New Jersey.....	78	(NA)	16	3	4	-	9	8	-	4	-	4
Pennsylvania.....	157	85	346	76	69	56	145	213	59	69	53	32
East North Central.....	125	89	910	185	165	228	332	603	130	165	205	103
Ohio.....	107	79	237	57	49	45	86	144	40	49	42	13
Illinois.....	127	76	261	53	34	76	98	191	42	34	74	41
Wisconsin.....	138	152	117	20	42	18	37	89	11	42	12	24
West North Central.....	133	120	618	117	179	104	218	514	110	179	89	136
Missouri.....	110	93	229	46	64	28	91	183	41	64	26	52
Nebraska.....	143	(NA)	37	5	13	5	14	30	5	13	5	7
Kansas.....	181	148	120	20	37	26	37	107	20	37	24	26
South Atlantic.....	106	70	437	85	108	85	159	299	60	108	75	56
Maryland.....	136	56	51	12	10	15	14	39	11	10	13	5
Virginia.....	113	80	144	27	43	26	48	99	20	43	20	16
West Virginia.....	113	69	50	8	8	12	22	32	5	8	12	7
Georgia.....	86	(NA)	23	2	7	2	12	15	2	7	2	4
Florida.....	92	69	134	31	33	23	47	91	17	33	21	20
East South Central.....	117	80	436	91	103	76	166	271	64	103	67	37
Kentucky.....	123	(NA)	230	47	58	41	84	142	30	58	35	19

See footnotes at end of table.

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954—Continued

Industry, geographic area, and type of operation	1963 (1,000 hp.)—Continued							
	Prime movers (horsepower)—Continued		Electric motors (horsepower)					
	By use		Total	By type of equipment			By source of power	
	Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated at same establishment
1411.—Dimension stone industry, total.....	3	53	23	9	(Z)	14	23	(Z)
Dimension limestone subindustry.....	1	12	5	1	(Z)	4	5	(Z)
Dimension granite subindustry.....	1	17	10	5	(Z)	5	10	(Z)
Dimension stone, n.e.c., subindustry.....	1	24	8	3	-	5	8	-
1421.—Crushed and broken stone industry, total.....	283	2,624	1,404	175	73	1,151	1,362	42
New England.....	(Z)	52	28	4	1	23	28	-
Massachusetts.....	-	17	13	2	-	11	13	-
Connecticut.....	(Z)	22	10	1	(Z)	9	10	-
Middle Atlantic, total.....	35	404	283	32	9	247	284	4
New York.....	15	112	75	7	(Z)	68	72	3
New Jersey.....	1	43	41	4	1	36	41	-
Pennsylvania.....	19	249	177	21	8	143	171	1
East North Central, total.....	74	548	339	56	25	260	321	12
Ohio.....	4	142	96	17	3	76	94	2
Indiana.....	13	94	55	1	2	52	57	3
Illinois.....	23	168	82	11	2	69	76	12
Michigan.....	30	43	66	17	10	39	65	1
Wisconsin.....	4	101	40	10	6	24	40	(Z)
West North Central.....	53	491	119	8	15	96	112	7
Minnesota.....	2	26	9	1	(Z)	3	9	(Z)
Iowa.....	15	148	37	1	11	30	31	1
Missouri.....	30	167	50	6	1	43	48	2
Nebraska.....	1	29	7	-	-	7	7	(Z)
Kansas.....	4	110	18	(Z)	2	16	15	3
South Atlantic, total.....	37	514	290	35	12	243	287	3
Delaware and Maryland.....	15	36	18	1	2	15	18	(Z)
Virginia.....	8	156	74	7	6	61	73	1
West Virginia.....	2	34	20	3	1	16	19	1
North Carolina.....	1	82	60	3	-	56	60	-
South Carolina.....	5	44	21	1	1	19	21	-
Georgia.....	2	75	54	1	-	53	53	1
Florida.....	4	37	43	14	2	29	43	(Z)
East South Central, total.....	26	252	177	22	9	140	174	3
Kentucky.....	10	132	90	17	6	67	88	2
Tennessee.....	15	82	52	9	1	42	52	(Z)
Alabama.....	1	33	35	2	2	31	34	1
West South Central, total.....	38	136	73	6	3	64	74	4
Arkansas and Louisiana.....	4	24	25	3	-	22	24	1
Oklahoma.....	1	31	29	2	1	27	29	1
Texas.....	33	81	33	1	2	30	31	2
Mountain.....	7	46	12	1	-	11	11	1
Pacific, total.....	13	121	73	5	1	67	71	2
Washington.....	2	32	19	(Z)	(Z)	19	9	1
Oregon.....	4	36	15	3	(Z)	13	14	1
California.....	7	20	44	3	1	41	44	(Z)
Alaska and Hawaii.....	-	33	4	-	-	4	4	(Z)
<u>Crushed and Broken Limestone Subindustry</u>								
United States, total.....	246	1,991	1,020	143	60	797	922	32
<u>Geographic Area</u>								
Middle Atlantic, total.....	29	299	201	25	3	173	197	4
New York.....	15	92	59	3	(Z)	54	54	3
New Jersey.....	(Z)	3	3	3	-	3	3	-
Pennsylvania.....	14	199	134	17	3	114	133	1
East North Central.....	74	529	325	55	25	249	301	12
Ohio.....	4	140	95	17	3	75	93	2
Illinois.....	23	168	82	11	2	69	75	12
Wisconsin.....	4	35	23	9	-	13	24	-
West North Central.....	44	470	119	7	15	33	124	6
Missouri.....	22	161	47	2	2	41	46	1
Nebraska.....	1	29	7	-	-	7	7	(Z)
Kansas.....	5	102	16	(Z)	3	14	13	3
South Atlantic.....	37	269	141	25	12	116	132	3
Maryland.....	15	24	12	1	2	9	12	-
Virginia.....	6	93	46	7	6	33	45	1
West Virginia.....	2	30	19	3	(Z)	16	12	1
Georgia.....	1	14	9	(Z)	-	9	9	1
Florida.....	4	87	43	14	2	29	43	(Z)
East South Central.....	27	244	163	27	9	127	163	3
Kentucky.....	10	132	90	17	6	67	88	2

See footnotes at end of table.

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954—Continued

Industry, geographic area, and type of operation	Aggregate horsepower per production worker		1963 (1,000 hp.)									
			Aggregate horsepower (prime movers and electric motors driven by purchased energy)					Prime movers (horsepower)				
	1963	1954	Total	By type of equipment			Total	By type of equipment			All other equipment	
				Loading equipment	Transportation equipment			All other equipment	Loading equipment	Transportation equipment		
Highway type	Other	Highway type	Other									
1421.—Crushed and broken stone industry—Continued												
<u>Crushed and Broken Limestone Subindustry—Continued</u>												
<u>Geographic Area—Continued</u>												
West South Central.....	107	69	190	49	45	42	54	144	46	45	34	19
Oklahoma.....	72	60	38	5	13	10	10	23	3	13	4	3
Texas.....	129	76	131	40	29	28	34	105	40	29	26	10
Mountain.....	142	102	38	2	15	12	9	33	2	15	12	4
Pacific.....	87	64	44	6	11	10	17	30	6	11	9	4
<u>Type of Operation</u>												
Producing establishments.....	122	(NA)	3,209	643	756	639	1,171	2,230	500	756	570	404
Open quarries:												
Quarries only.....	95	(NA)	42	6	14	6	16	34	5	14	6	9
Quarries with preparation plants:												
Crushing.....	124	(NA)	2,812	579	649	566	1,018	1,958	452	649	500	357
Screening but no crushing and other preparation methods.....	109	(NA)	40	6	11	5	18	30	5	11	5	9
Combination open and underground quarries with crushing plants.....	103	(NA)	68	11	16	15	26	45	10	16	14	5
Underground quarries with crushing plants.....	96	(NA)	149	27	38	24	60	93	15	38	22	18
Separately operated preparation plants:												
With crushing and screening only.....	96	(NA)	14	4	3	2	5	11	4	3	2	2
All other preparation methods.....	248	(NA)	84	10	25	21	28	59	9	25	21	4
<u>Crushed and Broken Granite Subindustry</u>												
United States, total.....	105	72	362	66	69	75	152	237	59	69	73	36
<u>Geographic Area</u>												
South.....	103	61	286	51	53	57	125	186	47	53	55	31
Virginia.....	138	78	56	8	17	10	21	41	8	17	10	6
South Carolina.....	115	68	58	12	7	13	26	40	11	7	12	10
Georgia.....	81	55	74	16	13	12	33	47	15	13	12	7
Pacific.....	99	98	31	6	4	9	12	19	4	4	9	2
<u>Type of Operation</u>												
Producing establishments.....	105	(NA)	362	66	69	75	152	237	59	69	73	36
Quarries with preparation plants.....	104	(NA)	347	61	67	71	148	226	55	67	69	35
<u>Crushed and Broken Stone, N.E.C., Subindustry</u>												
United States, total.....	107	72	688	134	192	71	291	433	109	192	64	68
<u>Geographic Area</u>												
New England.....	119	(NA)	42	11	10	4	17	25	8	10	4	3
Middle Atlantic.....	99	(NA)	182	35	42	23	82	101	28	42	17	14
New Jersey.....	79	(NA)	60	10	13	5	32	30	9	13	4	4
East North Central.....	92	(NA)	33	4	12	2	15	19	3	12	2	2
South.....	93	(NA)	189	38	35	28	88	102	28	35	28	11
Virginia.....	113	(NA)	37	7	9	6	15	24	7	9	6	2
Georgia.....	80	(NA)	33	4	5	5	19	15	4	5	5	1
Pacific.....	128	(NA)	190	35	71	12	72	145	32	71	12	30
Oregon.....	117	(NA)	47	9	16	3	19	35	7	16	3	9
California.....	112	(NA)	71	14	21	5	31	48	13	21	5	9
Hawaii.....	141	(NA)	36	8	21	3	4	33	8	21	3	1
<u>Type of Operation</u>												
Producing establishments.....	108	(NA)	685	133	191	71	290	431	108	191	64	68
Open quarries:												
Quarries only.....	95	(NA)	33	12	13	1	7	25	9	13	1	2
Quarries with crushing.....	111	(NA)	596	114	169	63	250	376	92	169	56	59
Underground and combination open and underground quarries.....	76	(NA)	23	3	2	5	13	10	3	2	5	(2)
Separately operated preparation plants, except with crushing only.....	98	(NA)	18	4	4	1	9	11	4	4	1	2

See footnotes at end of table.



TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954—Continued

Industry, geographic area, and type of operation	1963 (1,000 hp.)—Continued							
	Prime movers (horsepower)—Continued		Electric motors (horsepower)					
	By use		Total	By type of equipment			By source of power	
	Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated at same establishment
1421.—Crushed and broken stone industry—Continued								
<u>Crushed and Broken Limestone Subindustry—Continued</u>								
<u>Geographic Area—Continued</u>								
West South Central.....	37	107	50	3	8	39	46	4
Oklahoma.....	1	22	16	2	6	8	15	1
Texas.....	33	72	28	(Z)	2	26	26	2
Mountain.....	5	28	5	(Z)	—	5	5	(Z)
Pacific.....	(Z)	30	14	(Z)	1	13	14	(Z)
<u>Type of Operation</u>								
All establishments.....	246	1,991	1,020	143	69	808	981	39
Producing establishments, total.....	246	1,984	1,017	143	69	805	979	38
Open quarries:								
Quarries only.....	2	32	8	1	—	7	8	(Z)
Quarries with preparation plants:								
Crushing.....	227	1,731	885	127	66	692	854	31
Screening but no crushing and other preparation methods.....	1	29	10	1	—	9	10	(Z)
Combination open and underground quarries with crushing plants.....	2	43	23	1	1	21	23	(Z)
Underground quarries with crushing plants.....	8	85	61	12	2	47	56	5
Separately operated preparation plants:								
With crushing and screening only.....	1	10	5	(Z)	—	5	3	2
All other preparation methods.....	5	54	25	1	—	24	25	—
<u>Crushed and Broken Granite Subindustry</u>								
<u>Geographic Area</u>								
United States, total.....	9	228	125	7	2	116	125	—
South.....	7	179	100	4	2	94	100	—
Virginia.....	2	39	15	—	(Z)	15	15	—
South Carolina.....	4	36	18	1	1	16	18	—
Georgia.....	1	46	27	1	—	26	27	—
Pacific.....	2	17	12	2	(Z)	10	12	—
<u>Type of Operation</u>								
Producing establishments.....	9	228	125	7	2	116	125	—
Quarries with preparation plants.....	8	218	121	6	2	113	121	—
<u>Crushed and Broken Stone, N.E.C., Subindustry</u>								
<u>Geographic Area</u>								
United States, total.....	28	405	259	25	7	227	255	4
New England.....	(Z)	25	17	3	(Z)	14	17	—
Middle Atlantic.....	6	95	81	7	6	68	81	—
New Jersey.....	1	29	30	1	1	28	30	—
East North Central.....	1	18	14	1	—	13	14	(Z)
South.....	1	101	87	10	(Z)	77	87	(Z)
Virginia.....	(Z)	24	13	—	—	13	13	(Z)
Georgia.....	—	15	18	—	—	18	18	—
Pacific.....	11	134	47	3	(Z)	44	45	2
Oregon.....	4	31	13	2	(Z)	11	12	1
California.....	4	44	23	1	—	22	23	—
Hawaii.....	—	33	3	—	—	3	3	(Z)
<u>Type of Operation</u>								
Producing establishments.....	28	403	258	25	7	226	254	4
Open quarries:								
Quarries only.....	1	24	8	3	—	5	8	—
Quarries with crushing.....	24	352	224	22	7	195	220	4
Underground and combination open and underground quarries.....	1	9	13	(Z)	(Z)	13	13	—
Separately operated preparation plants, with crushing only.....	1	10	7	(Z)	—	7	7	(Z)

Standard Notes: — Represents zero. (D) Withheld to avoid disclosure. (NA) Not available. (Z) Represents less than one half of the limit measure specified. n.e.c. Not elsewhere classified.

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963

Item	Establishments total	Establishments with average employment of—					
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees
INDUSTRY 1411.—DIMENSION STONE							
Establishments.....number..	319	316	2	1	-	-	-
Reporting water use, total.....do....	128	126	1	1	-	-	-
By source of water:							
Utility.....do....	16	15	-	1	-	-	-
Other than utility.....do....	55	55	-	-	-	-	-
Source not specified.....do....	57	56	1	-	-	-	-
By quantity of water intake:							
Under 1 million gallons.....do....	107	107	-	-	-	-	-
1-9 million gallons.....do....	10	9	-	1	-	-	-
10-19 million gallons.....do....	2	2	-	-	-	-	-
20-99 million gallons.....do....	2	2	-	-	-	-	-
100 million gallons and over.....do....	7	6	1	-	-	-	-
Employees.....do....	2,156	2,156	(D)	(D)	-	-	-
At establishments reporting water use.....do....	1,539	<u>1,539</u>	(D)	(D)	-	-	-
Value added in mining.....\$1,000..	14,842	<u>14,842</u>	(D)	(D)	-	-	-
Value added at establishments reporting water use.....do....	11,600	<u>11,600</u>	(D)	(D)	-	-	-
Dimension Limestone Subindustry							
Establishments.....number..	61	61	-	-	-	-	-
Reporting water use, total.....do....	20	20	-	-	-	-	-
By source of water:							
Utility.....do....	1	1	-	-	-	-	-
Other than utility.....do....	15	15	-	-	-	-	-
Source not specified.....do....	4	4	-	-	-	-	-
By quantity of water intake:							
Under 1 million gallons.....do....	14	14	-	-	-	-	-
1-9 million gallons.....do....	3	3	-	-	-	-	-
10-19 million gallons.....do....	-	-	-	-	-	-	-
20-99 million gallons.....do....	1	1	-	-	-	-	-
100 million gallons and over.....do....	2	2	-	-	-	-	-
Employees.....do....	326	326	-	-	-	-	-
At establishments reporting water use.....do....	208	208	-	-	-	-	-
Value added in mining.....\$1,000..	2,947	2,947	-	-	-	-	-
Value added at establishments reporting water use.....do....	2,076	2,076	-	-	-	-	-
Dimension Granite Subindustry							
Establishments.....number..	66	63	2	1	-	-	-
Reporting water use, total.....do....	42	40	1	1	-	-	-
By source of water:							
Utility.....do....	5	4	-	1	-	-	-
Other than utility.....do....	19	19	-	-	-	-	-
Source not specified.....do....	18	17	1	-	-	-	-
By quantity of water intake:							
Under 1 million gallons.....do....	34	34	-	-	-	-	-
1-9 million gallons.....do....	2	1	-	1	-	-	-
10-19 million gallons.....do....	2	2	-	-	-	-	-
20-99 million gallons.....do....	-	-	-	-	-	-	-
100 million gallons and over.....do....	4	3	1	-	-	-	-
Employees.....do....	824	824	(D)	(D)	-	-	-
At establishments reporting water use.....do....	744	<u>744</u>	(D)	(D)	-	-	-
Value added in mining.....\$1,000..	6,513	<u>6,513</u>	(D)	(D)	-	-	-
Value added at establishments reporting water use.....do....	5,981	<u>5,981</u>	(D)	(D)	-	-	-
Dimension Stone, N.E.C., Subindustry							
Establishments.....number..	192	192	-	-	-	-	-
Reporting water use, total.....do....	66	66	-	-	-	-	-
By source of water:							
Utility.....do....	10	10	-	-	-	-	-
Other than utility.....do....	21	21	-	-	-	-	-
Source not specified.....do....	35	35	-	-	-	-	-
By quantity of water intake:							

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963—Continued

Item	Establishments total	Establishments with average employment of—					
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees
Dimension Stone, N.E.C., Subindustry—Continued							
Value added in mining.....\$1,000..	5,382	5,382	-	-	-	-	-
Value added at establishments reporting water use.....do....	3,543	3,543	-	-	-	-	-
INDUSTRY 1421.—CRUSHED AND BROKEN STONE							
Establishments.....number..	2,256	2,088	127	35	5	1	-
Reporting water use, total.....do....	1,554	1,399	115	34	5	1	-
By source of water:							
Utility.....do....	229	190	29	8	2	-	-
Other than utility.....do....	1,000	901	73	22	3	1	-
Source not specified.....do....	325	308	13	4	-	-	-
By quantity of water intake:							
Under 1 million gallons.....do....	1,127	1,071	51	5	-	-	-
1-9 million gallons.....do....	168	131	27	9	1	-	-
10-19 million gallons.....do....	46	38	4	2	2	-	-
20-99 million gallons.....do....	71	55	7	9	-	-	-
100 million gallons and over.....do....	142	104	26	9	2	1	-
Employees.....do....	143,236	26,348	8,617	4,879	2,054	(D)	-
At establishments reporting water use.....do....	38,127	23,336	12,738	(D)	2,053	(D)	-
Value added in mining.....\$1,000..	581,655	347,271	122,048	87,108	24,728	(D)	-
Value added at establishments reporting water use.....do....	541,910	317,353	199,829	(D)	24,728	(D)	-
Crushed and Broken Limestone Subindustry							
Establishments.....number..	1,612	1,494	92	21	4	1	-
Reporting water use, total.....do....	1,104	998	81	20	4	1	-
By source of water:							
Utility.....do....	162	131	25	5	1	-	-
Other than utility.....do....	724	658	47	15	3	1	-
Source not specified.....do....	218	209	9	-	-	-	-
By quantity of water intake:							
Under 1 million gallons.....do....	819	780	36	3	-	-	-
1-9 million gallons.....do....	114	91	19	4	-	-	-
10-19 million gallons.....do....	33	28	3	-	2	-	-
20-99 million gallons.....do....	44	33	5	6	-	-	-
100 million gallons and over.....do....	94	64	18	7	2	1	-
Employees.....do....	131,095	19,569	6,108	4,673	(D)	(D)	-
At establishments reporting water use.....do....	27,341	27,341	(D)	(D)	(D)	(D)	-
Value added in mining.....\$1,000..	408,450	252,661	87,715	68,074	(D)	(D)	-
Value added at establishments reporting water use.....do....	377,243	377,243	(D)	(D)	(D)	(D)	-
Crushed and Broken Granite Subindustry							
Establishments.....number..	150	127	18	4	1	-	-
Reporting water use, total.....do....	108	85	18	4	1	-	-
By source of water:							
Utility.....do....	15	10	3	1	1	-	-
Other than utility.....do....	84	68	13	3	-	-	-
Source not specified.....do....	9	7	2	-	-	-	-
By quantity of water intake:							
Under 1 million gallons.....do....	59	53	6	-	-	-	-
1-9 million gallons.....do....	22	15	5	1	1	-	-
10-19 million gallons.....do....	3	3	-	-	-	-	-
20-99 million gallons.....do....	11	9	-	2	-	-	-
100 million gallons and over.....do....	13	5	7	1	-	-	-
Employees.....do....	4,060	1,908	1,350	802	(D)	-	-
At establishments reporting water use.....do....	3,909	1,757	1,350	802	(D)	-	-
Value added in mining.....\$1,000..	61,702	29,414	16,340	15,948	(D)	-	-
Value added at establishments reporting water use.....do....	60,299	28,011	16,340	15,948	(D)	-	-
Crushed and Broken Stone, N.E.C., Subindustry							
Establishments.....number..	494	467	17	10	-	-	-
Reporting water use, total.....do....	342	316	16	10	-	-	-

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963—Continued

Item	Establishments total	Establishments with average employment of—					
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees
	Crushed and Broken Stone, N.E.C. Subindustry—Continued						
Establishments--Continued							
Reporting water use--Continued							
By quantity of water intake--Continued							
20-99 million gallons.....do....	16	13	2	1	-	-	-
100 million gallons and over.....do....	35	33	1	1	-	-	-
Employees.....do....	18,081	4,871	1,159	1,457	-	-	-
At establishments reporting water use.....do....	6,877	<u>5,420</u>	(D)	1,457	-	-	-
Value added in mining.....\$1,000..	111,503	65,196	17,993	28,314	-	-	-
Value added at establishments reporting water use.....do....	104,368	<u>76,054</u>	(D)	28,314	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.

<sup>1</sup>Includes figures for number of employees at separately reported central offices and related facilities. These were not distributed by size of establishment.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963

Type of operation and tons per man-hour <sup>1</sup>	Establish- ments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expenditures
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
Dimension Limestone									
All establishments, total.....	61	326	1,266	286	568	1,108	2,947	3,513	282
Less than 0.29.....	6	59	111	55	99	104	193	309	39
0.30 to 0.39.....	4	61	294	53	112	261	705	777	15
0.40 to 0.49.....	4	20	86	16	37	79	139	154	4
0.50 to 0.69.....	5	45	218	40	92	185	700	779	69
0.70 to 0.89.....	7	65	292	57	110	261	598	729	77
0.90 and over.....	6	43	174	37	73	150	305	365	23
Undistributed <sup>2</sup> .....	29	33	91	28	45	68	247	400	55
Dimension Granite									
All establishments, total.....	66	824	3,601	773	1,645	3,271	6,513	9,428	385
Less than 0.05.....	3	247	1,040	234	457	923	1,468	2,318	29
0.05 to 0.09.....	13	107	424	100	234	405	592	1,093	24
0.10 to 0.19.....	9	117	542	108	217	488	1,184	1,554	150
0.20 to 0.29.....	9	248	1,162	228	478	1,035	2,143	2,864	81
0.30 to 0.39.....	2	60	286	59	157	276	446	803	56
0.40 to 0.49.....	1	45	147	44	102	144	680	796	45
0.50 to 0.59.....	5								
0.60 and over.....	5								
Undistributed <sup>2</sup> .....	15								
Dimension Stone, N.E.C.									
All establishments, total.....	192	1,006	2,977	911	1,607	2,607	5,382	6,794	447
Less than 0.05.....	7	193	547	174	337	476	668	858	22
0.05 to 0.09.....	14	83	216	76	140	193	408	490	21
0.10 to 0.19.....	28	253	573	230	362	508	986	1,199	94
0.20 to 0.29.....	13	116	281	107	192	255	532	627	35
0.30 to 0.39.....	9	68	249	65	129	239	493	651	32
0.40 to 0.49.....	7	24	58	21	37	55	118	146	8
0.50 to 0.59.....	10	55	277	51	100	251	500	590	22
0.60 to 0.69.....	4	25	110	23	45	104	196	234	21
0.70 to 0.89.....	4	25	108	24	46	104	252	287	6
0.90 and over.....	6	26	80	24	27	72	189	207	32
Undistributed <sup>2</sup> .....	90	138	478	116	192	350	1,040	1,505	154
Crushed and Broken Limestone									
All establishments, total.....	1,612	31,095	160,588	26,331	59,365	126,791	408,450	542,886	59,535
Less than 0.40.....	20	295	1,106	267	571	970	2,279	3,209	266
0.40 to 0.59.....	8	160	851	148	406	765	2,076	3,225	803
0.60 to 0.79.....	13	257	965	241	453	869	1,117	2,069	70
0.80 to 0.99.....	12	204	832	184	434	755	1,294	3,200	592
1.00 to 1.19.....	25	271	713	234	526	999	1,017	1,415	170
1.20 to 1.39.....	16	170	721	147	313	532	1,339	1,846	212
1.40 to 1.59.....	15	121	462	110	291	419	662	1,023	126
1.60 to 1.79.....	23	288	907	252	623	789	1,222	2,020	560
1.80 to 1.99.....	17	545	2,420	486	1,250	2,004	4,921	6,847	687
2.00 to 2.39.....	54	1,110	5,147	1,001	2,396	4,590	6,974	9,750	2,387
2.40 to 2.79.....	51	1,148	5,186	1,005	2,334	4,375	9,805	12,105	2,811
2.80 to 2.99.....	18	242	1,249	228	566	1,105	2,321	3,128	353
3.00 to 3.19.....	33	494	2,202	444	1,001	1,942	3,898	5,228	506
3.20 to 3.59.....	52	1,146	4,919	1,036	2,475	4,087	10,248	13,746	1,198
3.60 to 3.99.....	57	1,212	6,385	1,067	2,462	5,253	14,019	16,838	2,260
4.00 to 4.99.....	175	5,173	23,403	4,614	10,672	20,160	57,528	72,408	7,249
5.00 to 5.99.....	124	2,519	13,659	2,201	5,074	11,508	32,909	44,590	5,665
6.00 to 6.99.....	113	2,685	13,542	2,317	5,089	11,098	38,567	50,210	5,554
7.00 to 7.99.....	91	2,519	14,233	2,196	4,907	11,481	37,715	48,040	4,850
8.00 to 8.99.....	51	1,156	6,412	989	2,119	5,186	17,303	22,678	2,235
9.00 to 9.99.....	44	1,087	5,551	946	2,127	4,749	20,928	26,356	2,861
10.00 to 11.99.....	48	1,358	8,484	1,147	2,587	6,831	33,791	41,462	2,042
12.00 to 14.99.....	40	1,368	8,657	1,190	2,337	6,959	28,894	36,004	2,410
15.00 to 19.99.....	24	574	3,800	409	843	2,500	12,948	17,409	1,171
20.00 and over.....	22	376	2,526	230	269	1,456	14,318	16,571	1,443
Undistributed <sup>2</sup> .....	465	4,617	26,256	3,242	7,240	15,809	50,357	81,509	11,054
Producing open quarries with crushing plants, total.....	1,376	<sup>3</sup> 26,287	<sup>3</sup> 133,386	22,732	51,562	110,113	360,562	470,654	51,716
Less than 0.40.....	12	100	338	94	213	303	560	1,016	74
0.40 to 0.69.....	12	164	738	144	326	585	596	637	809
0.70 to 0.99.....	17	161	441	138	349	369	780	1,087	90
1.00 to 1.39.....	37	304	998	263	601	796	1,739	2,348	330
1.40 to 1.79.....	33	372	1,231	328	824	1,084	1,662	2,736	496
1.80 to 1.99.....	17	545	2,420	486	1,250	2,004	4,921	6,847	687
2.00 to 2.39.....	49	1,071	4,993	966	2,311	4,462	6,681	9,422	2,363
2.40 to 2.79.....	48	1,082	4,943	951	2,202	4,192	9,455	11,560	2,801
2.80 to 2.99.....	18	242	1,249	228	566	1,105	2,321	3,128	353
3.00 to 3.19.....	29	377	1,655	348	814	1,503	3,168	4,227	442

See footnotes at end of table.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963—Continued

Type of operation and tons per man-hour <sup>1</sup>	Establish- ments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expenditures
		Total	Payroll	Total	Man-hours	Wages			
	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
Crushed and Broken Limestone—Continued									
Producing open quarries with crushing plants—Continued									
3.20 to 3.99.....	46	971	3,991	879	2,115	3,587	8,605	11,548	
3.60 to 3.99.....	47	753	3,688	664	1,566	3,046	8,249	10,374	1,
4.00 to 4.99.....	161	4,686	21,174	4,172	9,735	18,263	52,149	65,712	6,
5.00 to 5.99.....	108	2,190	11,860	1,915	4,431	10,004	28,391	38,671	4,
6.00 to 6.99.....	100	2,270	11,198	1,969	4,320	9,323	33,915	42,439	4,
7.00 to 7.99.....	82	2,267	12,801	1,969	4,363	10,309	33,566	43,010	4,
8.00 to 8.99.....	47	1,087	6,033	931	1,995	4,896	16,248	21,356	2,
9.00 to 9.99.....	41	1,014	5,255	879	1,988	4,466	19,392	24,323	2,
10.00 to 11.99.....	39	1,194	7,702	997	2,308	6,147	30,715	36,987	1,
12.00 to 14.99.....	34	1,275	8,104	1,111	2,189	6,498	27,197	33,396	2,
15.00 and over.....	40	881	5,965	589	1,021	3,729	26,132	31,665	2,
Undistributed <sup>2</sup> .....	359	3,281	16,609	2,711	6,075	13,442	44,120	68,165	8,
Producing underground quarries with crushing plants, total.....	56	<sup>3</sup> 1,755	<sup>3</sup> 8,846	1,558	3,334	7,292	20,292	26,246	2,
Less than 2.00.....	3	151	631	139	286	574	1,541	1,997	
2.00 to 2.99.....	5	81	310	68	161	234	430	548	
3.00 to 3.59.....	7	254	1,295	218	466	804	1,970	2,701	
3.60 to 3.99.....	6	325	1,890	275	574	1,529	3,756	4,355	
4.00 to 4.99.....	8	272	1,282	252	501	1,140	3,045	3,737	
5.00 to 5.99.....	4	87	527	76	186	445	1,480	1,713	
6.00 to 6.99.....	6	145	713	123	253	579	1,890	2,457	
7.00 to 7.99.....	5	129	763	115	297	635	1,687	2,697	
8.00 to 9.99.....	3	93	382	84	174	350	1,812	2,368	
10.00 to 11.99.....	3	61	304	57	113	284	1,105	1,566	
Undistributed <sup>2</sup> .....	6	157	749	151	323	718	1,576	2,107	
Crushed and Broken Granite									
All establishments, total.....	150	4,060	19,826	3,449	7,894	16,010	61,702	89,749	7,
Less than 1.20.....	3	41	183	34	79	144	192	284	
1.20 to 1.99.....	6	96	481	82	157	428	648	646	
2.00 to 2.99.....	7	279	1,409	234	514	1,091	3,562	5,807	
3.00 to 3.99.....	8	589	3,023	488	1,183	2,529	7,209	10,010	1,
4.00 to 4.99.....	9	318	1,573	282	667	1,308	3,698	5,002	
5.00 to 5.99.....	18	437	2,114	357	885	1,739	5,739	7,504	
6.00 to 6.99.....	17	562	2,732	486	1,171	2,230	7,641	10,912	
7.00 to 7.99.....	13	453	2,088	423	997	1,864	5,997	10,599	1,
8.00 to 8.99.....	9	314	1,325	285	616	1,141	4,976	8,101	
9.00 to 9.99.....	5	167	645	163	290	610	2,749	3,960	
10.00 to 11.99.....	4	33	133	28	60	112	745	901	
12.00 to 19.99.....	6	166	1,142	135	302	891	5,904	6,025	
20.00 and over.....	5	35	92	32	23	74	1,222	1,254	
Undistributed <sup>2</sup> .....	40	570	2,886	420	950	1,849	11,420	18,744	
Open quarries with crushing only, total.....	38	281	1,322	250	525	1,150	4,235	4,776	
Less than 3.00.....	6	92	434	88	177	408	772	827	
3.00 to 5.99.....	6	32	161	30	69	158	327	398	
6.00 to 11.99.....	7	141	663	116	244	520	2,676	2,958	
12.00 and over.....	3	8	37	8	18	37	192	251	
Undistributed <sup>2</sup> .....	16	8	27	8	17	27	268	342	
Crushed and Broken Stone, N.E.C.									
All establishments, total.....	494	8,081	48,701	6,406	13,575	35,042	111,503	162,225	15,
Less than 0.20.....	7	125	454	120	245	425	912	1,468	
0.20 to 0.39.....	10	261	1,068	233	523	912	2,512	2,654	
0.40 to 0.59.....	6	103	435	98	208	415	797	1,458	
0.60 to 0.79.....	9	53	139	49	105	132	185	283	
0.80 to 0.99.....	7	291	1,318	229	485	1,000	4,208	8,087	
1.00 to 1.19.....	7	219	1,134	167	388	873	2,339	4,412	
1.20 to 1.39.....	4	215	1,267	168	321	889	5,321	8,855	
1.40 to 1.59.....	8	189	971	150	342	737	2,868	4,923	
1.60 to 1.99.....	9	111	509	98	200	438	1,553	2,208	
2.00 to 2.39.....	9	157	855	143	266	751	1,701	2,835	
2.40 to 2.79.....	14	220	885	189	422	720	1,554	2,149	
2.80 to 2.99.....	6	77	328	71	171	303	590	983	
3.00 to 3.19.....	12	237	928	224	547	855	2,142	3,254	
3.20 to 3.59.....	11	131	592	111	244	556	1,819	2,532	
3.60 to 3.99.....	18	408	2,584	353	813	2,263	5,740	8,440	
4.00 to 4.99.....	37	823	4,960	721	1,564	3,745	10,988	14,296	3,
5.00 to 5.99.....	36	1,042	6,919	937	1,878	5,574	17,232	22,719	1,
6.00 to 6.99.....	26	717	5,144	575	1,263	4,061	11,916	16,006	1,
7.00 to 7.99.....	18	322	1,908	280	641	1,703	4,870	7,233	
8.00 to 8.99.....	14	177	1,113	150	292	906	2,959	4,526	
9.00 to 9.99.....	11	227	1,862	201	451	1,528	5,643	7,673	
10.00 to 11.99.....	12	159	1,067	142	301	857	4,020	5,087	
12.00 to 14.99.....	13	191	1,326	141	277	865	4,307	5,344	
15.00 to 19.99.....	4	23	135	18	34	105	411	477	
20.00 and over.....	13	61	474	43	106	458	1,908	2,455	
Undistributed <sup>2</sup> .....	173	1,542	10,326	795	1,488	3,971	13,008	21,868	

See footnotes at end of table.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963—Continued

Type of operation and tons per man-hour <sup>1</sup>	Establish- ments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expenditures
		Total	Payroll	Total	Man-hours	Wages			
	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
	Crushed and Broken Stone, N.E.C.—Continued								
Producing open quarries with crushing plants, total.....	388	36,313	327,862	5,370	11,512	30,278	95,767	137,827	14,162
Less than 0.40.....	13	321	1,335	295	661	1,178	3,198	3,699	685
0.40 to 0.69.....	7	118	482	112	241	461	782	1,392	900
0.70 to 0.99.....	8	275	1,173	216	437	866	3,976	7,733	541
1.00 to 1.19.....	7	219	1,134	167	388	873	2,339	4,412	329
1.20 to 1.59.....	7	224	1,302	177	346	928	5,302	8,919	70
1.60 to 1.99.....	5	46	246	40	82	208	405	594	34
2.00 to 2.99.....	22	341	1,643	301	656	1,399	2,880	4,561	391
3.00 to 3.19.....	9	206	811	194	492	742	1,895	2,842	266
3.20 to 3.59.....	7	87	445	71	162	422	1,478	2,097	115
3.60 to 3.99.....	14	340	2,172	289	665	1,893	3,983	6,496	491
4.00 to 4.99.....	33	779	4,646	679	1,478	3,461	10,314	13,508	3,264
5.00 to 5.99.....	30	838	5,978	754	1,605	4,719	14,502	18,900	1,486
6.00 to 6.99.....	26	717	5,144	575	1,263	4,061	11,916	16,006	1,575
7.00 to 8.99.....	28	439	2,617	374	717	2,223	6,514	9,904	793
9.00 to 11.99.....	18	342	2,671	304	655	2,173	8,790	11,392	613
12.00 to 19.99.....	12	205	1,407	150	296	916	4,567	5,640	703
20.00 and over.....	9	38	306	20	60	290	1,103	1,473	52
Undistributed <sup>2</sup> .....	133	778	4,350	652	1,308	3,465	11,823	18,259	1,854

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

<sup>1</sup>Represents tons of primary products of the industry shipped per man-hour worked by production, development, and exploration workers.

<sup>2</sup>Represents establishments with no production, development, or exploration worker man-hours, with man-hours spent on exploration or development work amounting to 30 percent or more of total man-hours of production, development, and exploration workers, with cost of contract work amounting to 30 percent or more of production, development, and exploration worker wages, with number of working proprietors amounting to 30 percent or more of number of production, development, and exploration workers or, except as specified, nonproducing establishments. Also, except for distributions by type of operation, includes figures for the number and payroll of employees at separately reported central offices and related facilities.

<sup>3</sup>Excludes figures for employees at separately reported central offices and related facilities. These were not distributed by type of operation.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining, by Geographic Areas: 1963

Ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expendi- tures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
Dimension Limestone Subindustry									
United States, total.....	61	326	1,266	286	568	1,108	2,947	3,513	282
Less than 0.10.....	3	7	7	7	14	7	73	85	13
0.10 to 0.19.....	4								
0.20 to 0.29.....	2								
0.30 to 0.39.....	12								
0.40 to 0.49.....	10	67	220	57	103	186	520	617	88
0.50 to 0.59.....	3								
0.60 to 0.69.....	7								
0.70 to 0.79.....	1								
1.00 and over.....	2	136	525	123	247	483	809	1,061	73
Undistributed <sup>2</sup> .....	17								
East North Central, total.....	23	164	830	141	313	724	1,918	2,214	122
Less than 0.10.....	2	78	393	68	159	337	1,283	1,350	67
0.10 to 0.19.....	3								
0.20 to 0.29.....	1								
0.30 to 0.39.....	4								
0.40 to 0.49.....	1	81	406	71	153	375	638	769	47
0.50 to 0.59.....	1								
0.60 to 0.69.....	3								
0.70 to 0.79.....	1								
Undistributed <sup>2</sup> .....	7	5	31	2	1	12	3	95	8
Dimension Granite Subindustry									
United States, total.....	66	824	3,601	773	1,645	3,271	6,513	9,428	385
Less than 0.10.....	1	25	62	25	45	62	538	599	19
0.10 to 0.19.....	5								
0.20 to 0.29.....	5								
0.30 to 0.39.....	7								
0.40 to 0.49.....	9	115	459	102	202	409	1,051	1,325	45
0.50 to 0.59.....	7								
0.60 to 0.69.....	2								
0.70 to 0.79.....	2								
0.80 to 0.89.....	9	131	575	126	291	543	657	1,321	78
0.90 to 0.99.....	1								
1.00 and over.....	11								
Undistributed <sup>2</sup> .....	7								
North Central, total.....	22	153	603	144	288	569	1,241	1,849	37
0.10 to 0.19.....	1	67	234	62	122	222	792	970	10
0.20 to 0.29.....	3								
0.30 to 0.39.....	1								
0.40 to 0.49.....	4								
0.50 to 0.59.....	1	70	314	66	136	292	371	696	22
0.70 to 0.79.....	1								
0.80 to 0.89.....	7								
0.90 to 0.99.....	1								
1.00 and over.....	1	16	55	16	30	55	78	183	5
Undistributed <sup>2</sup> .....	2								
South Atlantic, total.....	18	160	457	155	288	446	727	1,108	41
0.10 to 0.19.....	2	35	103	35	66	103	322	407	8
0.20 to 0.29.....	1								
0.30 to 0.39.....	3								
0.40 to 0.49.....	3								
0.50 to 0.59.....	2	40	105	37	70	97	202	271	11
0.60 to 0.69.....	2								
0.80 to 0.89.....	1								
1.00 and over.....	3								
Undistributed <sup>2</sup> .....	2	85	249	83	152	246	203	430	22
Dimension Stone, N.E.C., Subindustry									
United States, total.....	192	1,006	2,977	911	1,607	2,607	5,382	6,794	447
Less than 0.10.....	1	11	25	11	17	25	208	263	33
0.10 to 0.19.....	8								
0.20 to 0.29.....	8								
0.30 to 0.39.....	18								
0.40 to 0.49.....	27	212	539	192	334	496	1,089	1,285	103
0.50 to 0.59.....	40								
0.60 to 0.69.....	12								
0.70 to 0.79.....	9								
0.80 to 0.89.....	8	40	121	39	76	120	146	187	30
1.00 and over.....	19								
Undistributed <sup>2</sup> .....	42								
Middle Atlantic, total.....	37								
0.10 to 0.19.....	1	25	63	23	40	60	210	227	26
0.20 to 0.29.....	1								
0.30 to 0.39.....	3								
0.40 to 0.49.....	6								
0.50 to 0.59.....	9	52	169	49	67	153	301	346	19
0.60 to 0.69.....	2								
0.70 to 0.79.....	3								
0.80 to 0.89.....	1								
		73	294	65	133	239	422	551	27

See footnotes at end of table.



TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining, by Geographic Areas: 1963—Continued

Ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expendi- tures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
Dimension Stone, N.E.C., Subindustry—Continued									
Middle Atlantic—Continued									
1.00 and over.....	2	22	91	19	34	67	96	197	3
Undistributed <sup>2</sup> .....	9								
North Central, total.....	36	166	626	142	263	501	1,099	1,311	57
0.10 to 0.19.....	2	30	124	30	64	124	384	438	16
0.20 to 0.29.....	1								
0.30 to 0.39.....	5								
0.40 to 0.49.....	5								
0.50 to 0.59.....	8								
0.60 to 0.69.....	2	35	94	28	49	77	201	212	12
0.70 to 0.79.....	1								
0.80 to 0.89.....	2								
1.00 and over.....	4								
Undistributed <sup>2</sup> .....	6								
Pacific, total.....	44	86	322	75	135	289	828	1,177	93
0.10 to 0.19.....	3	20	97	17	31	81	404	646	17
0.20 to 0.29.....	4								
0.30 to 0.39.....	4								
0.40 to 0.49.....	5								
0.50 to 0.59.....	8								
0.60 to 0.69.....	1	18	52	17	32	50	98	127	7
0.70 to 0.79.....	1								
0.80 to 0.89.....	1								
1.00 and over.....	2								
Undistributed <sup>2</sup> .....	16								
		11	32	8	14	25	39	89	18
Crushed and Broken Limestone Subindustry									
United States, total.....	1,612	31,095	160,588	26,331	59,365	126,791	408,450	542,886	59,535
Less than 0.10.....	17	86	387	66	146	334	9,824	10,383	751
0.10 to 0.19.....	100	1,559	6,954	1,352	2,972	5,965	41,744	47,532	5,663
0.20 to 0.29.....	224	4,752	25,026	4,249	9,839	19,383	101,830	125,279	11,415
0.30 to 0.39.....	411	8,509	39,589	7,436	17,616	33,566	116,804	146,227	16,245
0.40 to 0.49.....	197	4,842	25,675	4,106	9,123	10,873	57,460	77,317	6,896
0.50 to 0.59.....	157	3,923	21,778	3,389	7,348	17,486	39,977	55,705	7,024
0.60 to 0.69.....	104	2,127	11,141	1,795	3,830	8,494	17,208	30,215	3,945
0.70 to 0.79.....	70	1,536	7,761	1,354	2,933	6,234	10,452	16,854	1,355
0.80 to 0.89.....	42	811	3,924	686	1,477	3,079	4,684	9,435	966
0.90 to 0.99.....	16	289	1,645	241	498	1,097	1,722	2,529	1,116
1.00 and over.....	110	1,632	8,514	1,422	3,121	7,250	4,588	14,889	2,683
Undistributed <sup>2</sup> .....	164	1,029	8,194	235	462	1,070	2,162	6,521	1,476
New England, total.....	16	283	1,397	242	570	1,022	2,914	3,833	503
0.20 to 0.29.....	1	138	537	125	311	445	1,792	2,116	348
0.30 to 0.39.....	8								
0.50 to 0.59.....	3								
0.70 to 0.79.....	1								
0.80 to 0.89.....	1								
1.00 and over.....	2	72	400	59	137	291	324	754	72
Middle Atlantic, total.....	178	4,676	27,301	3,775	8,465	20,766	69,502	92,583	9,132
Less than 0.10.....	1	170	925	127	218	695	7,840	8,401	458
0.10 to 0.19.....	9								
0.20 to 0.29.....	23								
0.30 to 0.39.....	47								
0.40 to 0.49.....	27								
0.50 to 0.59.....	27	634	3,749	533	1,114	2,801	6,968	9,713	876
0.60 to 0.69.....	19	457	3,068	349	743	2,060	4,688	7,882	1,116
0.70 to 0.79.....	7	198	1,257	177	343	1,044	1,697	2,626	83
0.80 to 0.89.....	4	46	223	40	90	181	259	728	105
1.00 and over.....	8	84	385	69	157	354	1,197	852	97
Undistributed <sup>2</sup> .....	6	245	1,972	31	68	115	296	941	610
East North Central, total.....	443	8,747	48,940	7,290	15,897	38,061	121,408	159,590	15,485
Less than 0.10.....	7	21	137	19	51	129	5,299	5,758	331
0.10 to 0.19.....	29	317	1,643	260	620	1,424	9,513	11,034	1,295
0.20 to 0.29.....	51	1,113	6,141	987	2,115	5,223	25,554	32,009	2,072
0.30 to 0.39.....	105	2,878	14,330	2,496	5,562	12,030	42,474	51,907	5,085
0.40 to 0.49.....	50	1,274	7,496	1,039	2,207	5,882	16,487	21,412	1,706
0.50 to 0.59.....	43	1,129	6,696	997	2,168	5,643	12,234	16,741	2,376
0.60 to 0.69.....	25	393	2,326	324	677	1,788	3,721	6,213	876
0.70 to 0.79.....	17	399	2,216	330	774	1,475	2,979	4,714	344
0.80 to 0.89.....	12	251	1,230	203	451	945	1,459	2,662	122
0.90 to 0.99.....	2								
1.00 and over.....	39								
Undistributed <sup>2</sup> .....	63								
West North Central, total.....	403	5,423	27,620	4,634	10,600	22,105	62,479	86,741	11,669
Less than 0.10.....	5	11	32	9	19	28	427	526	31
0.10 to 0.19.....	21	199	828	178	350	718	4,849	4,906	1,099
0.20 to 0.29.....	53	643	3,223	579	1,380	2,804	12,174	15,043	2,014
0.30 to 0.39.....	103	1,335	6,110	1,158	2,847	5,048	17,965	22,432	3,150
0.40 to 0.49.....	47	795	4,559	669	1,702	3,611	10,139	14,059	1,807
0.50 to 0.59.....	35	654	3,636	568	1,162	2,885	6,748	9,288	1,497
0.60 to 0.69.....	23	498	2,441	413	870	1,806	3,722	6,358	520

See footnotes at end of table.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining, by Geographic Areas: 1963—Continued

Ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expendi- tures (\$1,000)	
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)				
Crushed and Broken Limestone Subindustry—Continued										
West North Central—Continued										
0.70 to 0.79.....	25	485	2,233	445	905	2,045	2,998	5,380	429	
0.80 to 0.89.....	9	155	843	143	332	759	1,005	2,762	151	
0.90 to 0.99.....	7	53	198	49	103	183	215	580	51	
1.00 and over.....	29	451	2,389	379	846	1,972	1,624	4,488	835	
Undistributed <sup>2</sup> .....	46	144	1,128	44	84	246	613	919	85	
South Atlantic, total.....	201	4,716	22,393	4,107	9,543	17,833	58,578	79,095	6,489	
Less than 0.10.....	2	}	282	1,035	249	517	902	6,756	8,322	809
0.10 to 0.19.....	11									
0.20 to 0.29.....	24									
0.30 to 0.39.....	49									
0.40 to 0.49.....	33									
0.50 to 0.59.....	18									
0.60 to 0.69.....	14									
0.70 to 0.79.....	9									
0.80 to 0.89.....	6									
0.90 to 0.99.....	2									
1.00 and over.....	17	254	1,152	228	529	1,014	852	2,209	315	
Undistributed <sup>2</sup> .....	16	118	985	11	26	46	1,224	2,404	126	
East North Central, total.....	211	4,283	18,393	3,732	8,521	15,065	60,134	77,349	9,972	
Less than 0.10.....	1	}	607	2,580	540	1,268	2,253	15,734	17,741	2,251
0.10 to 0.19.....	25									
0.20 to 0.29.....	51									
0.30 to 0.39.....	54									
0.40 to 0.49.....	29									
0.50 to 0.59.....	13									
0.60 to 0.69.....	8									
0.70 to 0.79.....	5									
0.80 to 0.89.....	5									
0.90 to 0.99.....	1									
1.00 and over.....	7	105	392	92	230	319	321	932	220	
Undistributed <sup>2</sup> .....	12	70	442	37	96	150	( <sup>3</sup> )	544	301	
West South Central, total.....	73	2,068	10,012	1,779	4,088	8,011	22,536	30,324	4,952	
Less than 0.10.....	1	}	31	120	29	59	109	804	901	72
0.10 to 0.19.....	2									
0.20 to 0.29.....	10									
0.30 to 0.39.....	17									
0.40 to 0.49.....	6									
0.50 to 0.59.....	13									
0.60 to 0.69.....	8									
0.70 to 0.79.....	2									
0.80 to 0.89.....	2									
0.90 to 0.99.....	2									
1.00 and over.....	4	124	752	103	225	401	676	1,028	1,058	
Undistributed <sup>2</sup> .....	7	111	624	33	56	109	( <sup>3</sup> )	133	13	
Mountain, total.....	33	327	1,519	268	545	1,360	4,339	5,261	574	
0.10 to 0.19.....	2	}	114	662	103	211	561	2,870	3,255	289
0.20 to 0.29.....	7									
0.30 to 0.39.....	8									
0.40 to 0.49.....	1									
0.50 to 0.59.....	3									
0.60 to 0.69.....	3									
0.70 to 0.79.....	3									
0.80 to 0.89.....	1									
0.90 to 0.99.....	1									
1.00 and over.....	2									
Undistributed <sup>2</sup> .....	2									
Pacific, total.....	54	572	3,013	504	1,136	2,568	6,560	8,110	759	
0.10 to 0.19.....	1	}	37	275	33	58	248	1,075	1,150	70
0.20 to 0.29.....	4									
0.30 to 0.39.....	20									
0.40 to 0.49.....	4									
0.50 to 0.59.....	2									
0.60 to 0.69.....	4									
0.70 to 0.79.....	1									
0.80 to 0.89.....	3									
0.90 to 0.99.....	1									
1.00 and over.....	2									
Undistributed <sup>2</sup> .....	12	18	102	16	34	88	3	104	65	
Crushed and Broken Granite Subindustry										
United States, total.....										
Less than 0.10.....	5	60	217	56	98	184	2,604	2,664	36	
0.10 to 0.19.....	21	433	1,937	358	767	1,467	12,517	18,530	536	
0.20 to 0.29.....	33	1,273	6,280	1,099	2,454	5,158	24,356	31,172	2,380	
0.30 to 0.39.....	24	675	3,041	615	1,467	2,562	8,445	12,379	1,348	
0.40 to 0.49.....	12	256	1,310	235	573	1,167	2,952	4,856	778	
0.50 to 0.59.....	11	766	4,084	636	1,555	3,453	7,859	14,285	1,645	
0.60 to 0.69.....	7	173	709	147	308	616	1,061	1,795	31	
0.70 to 0.79.....	5	84	455	79	179	414	620	1,016	90	

See footnotes at end of table.

TABLE 9 General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining, by Geographic Areas: 1963—Continued

Ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expendi- tures (\$1,000)	
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1 000)	Wages (\$1 000)				
Crushed and Broken Granite Subindustry—Continued										
United States—Continued										
0.80 to 0.89.....	2	}	100	449	83	175	343	491	874	139
0.90 to 0.99.....	2									
1.00 and over.....	12		163	790	138	315	638	609	1,642	165
Undistributed <sup>2</sup> .....	16		77	554	3	3	8	188	536	37
South, total.....	80		3,204	14,781	2,765	6,452	12,055	48,496	72,411	5,254
Less than 0.10.....	2	}	474	2,076	398	829	1,588	14,340	20,354	499
0.10 to 0.19.....	14									
0.20 to 0.29.....	25		999	4,387	880	2,022	3,716	16,799	21,559	1,286
0.30 to 0.39.....	18		618	2,775	563	1,345	2,323	7,747	11,495	1,192
0.40 to 0.49.....	4	}	201	996	181	464	863	2,246	4,185	564
0.50 to 0.59.....	6		609	3,177	529	1,325	2,791	6,143	12,045	1,572
0.60 to 0.69.....	4									
0.70 to 0.79.....	1		184	731	156	337	573	1,013	1,863	87
0.80 to 0.89.....	2	}								
1.00 and over.....	3		119	639	58	130	201	208	910	54
Undistributed <sup>2</sup> .....	1									
Pacific, total.....	44			401	2,697	312	661	2,048	8,772	10,916
Less than 0.10.....	1	}	13	41	12	26	39	309	373	35
0.10 to 0.19.....	6									
0.20 to 0.29.....	6		243	1,761	188	387	1,310	7,044	8,798	1,092
0.30 to 0.39.....	3		12	58	11	25	54	151	175	5
0.40 to 0.49.....	6	}	41	248	41	87	248	563	489	206
0.50 to 0.59.....	1		17	59	10	21	56	96	120	8
0.60 to 0.69.....	2									
0.70 to 0.79.....	3		29	211	27	68	195	281	499	87
0.80 to 0.89.....	1	}								
0.90 to 0.99.....	4		46	319	23	47	146	155	228	53
1.00 and over.....	4									
Undistributed <sup>2</sup> .....	11				-	-	-	173	234	32
Crushed and Broken Stone, N.E.C., Subindustry										
United States, total.....	494		8,081	48,701	6,406	13,575	35,042	111,503	162,225	15,967
Less than 0.10.....	15	}	38	147	33	61	119	2,840	4,039	494
0.10 to 0.19.....	23		262	1,051	241	530	936	6,085	7,934	625
0.20 to 0.29.....	67		1,560	8,791	1,315	2,981	6,264	35,583	47,759	6,003
0.30 to 0.39.....	67		1,368	8,271	1,187	2,222	7,041	24,278	34,538	2,198
0.40 to 0.49.....	84	}	1,881	10,985	1,650	3,641	9,245	24,689	34,899	3,602
0.50 to 0.59.....	61		670	3,538	539	1,114	6,337	9,994	14,337	705
0.60 to 0.69.....	23		337	2,059	263	589	1,624	3,194	5,002	297
0.70 to 0.79.....	26		454	2,942	378	799	2,266	3,953	6,846	757
0.80 to 0.89.....	16	}	198	1,049	177	369	955	1,240	2,295	130
0.90 to 0.99.....	13		145	908	119	256	770	969	2,060	349
1.00 and over.....	35		493	3,103	449	908	2,820	5,147	642	642
Undistributed <sup>2</sup> .....	64		675	5,857	55	105	421	453	1,712	165
New England, total.....	19		437	3,187	353	796	2,401	6,677	8,824	810
0.10 to 0.19.....	2	}								
0.30 to 0.39.....	4		155	1,012	134	281	830	3,109	3,620	435
0.40 to 0.49.....	5		139	1,027	125	285	914	2,348	3,215	228
0.50 to 0.59.....	2									
0.60 to 0.69.....	1	}	59	429	51	138	366	735	1,133	106
0.70 to 0.79.....	1									
0.80 to 0.89.....	1									
1.00 and over.....	1		84	719	43	92	291	415	856	71
Undistributed <sup>2</sup> .....	2									
Middle Atlantic, total.....	89		2,579	18,203	1,837	4,285	11,215	38,413	54,138	5,494
Less than 0.10.....	1	}	51	175	49	100	165	1,034	1,431	174
0.10 to 0.19.....	4									
0.20 to 0.29.....	14		506	3,209	434	1,052	2,070	13,234	17,155	3,407
0.30 to 0.39.....	8		393	2,967	333	769	2,460	8,490	12,124	656
0.40 to 0.49.....	15	}	594	4,286	459	1,114	3,155	9,575	12,532	276
0.50 to 0.59.....	16		248	1,577	191	459	1,067	2,760	3,860	312
0.60 to 0.69.....	4		75	574	60	140	434	893	1,453	49
0.70 to 0.79.....	6		168	1,105	115	247	690	1,437	2,698	382
0.80 to 0.89.....	1	}								
0.90 to 0.99.....	3		83	486	73	156	404	534	959	46
1.00 and over.....	9		133	843	123	248	760	348	1,616	172
Undistributed <sup>2</sup> .....	8		328	2,981	-	-	10	108	310	20
East North Central, total.....	20		552	3,268	358	691	1,736	8,981	14,598	1,247
Less than 0.10.....	2	}								
0.20 to 0.29.....	2									
0.30 to 0.39.....	1		370	2,021	292	575	1,479	8,524	13,961	1,193
0.40 to 0.49.....	5									
0.70 to 0.79.....	1	}								
0.80 to 0.89.....	3		55	230	51	82	181	296	369	50
0.90 to 0.99.....	1									
1.00 and over.....	2									
Undistributed <sup>2</sup> .....	3		127	1,017	15	34	76	161	268	4
West North Central, total.....	21		206	1,072	139	265	573	1,350	2,053	303

See footnotes at end of table.

TABLE 9 General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining, by Geographic Areas: 1963—Continued

Ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expendi- tures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
Crushed and Broken Stone, N.E.C., Subindustry—Continued									
West North Central—Continued									
0.10 to 0.19.....	2	27	124	27	52	124	532	597	55
0.20 to 0.29.....	6								
0.30 to 0.39.....	2								
0.40 to 0.49.....	3								
0.50 to 0.59.....	2	53	250	48	78	224	660	819	130
0.60 to 0.69.....	2								
0.70 to 0.79.....	1								
0.80 to 0.89.....	1								
0.90 to 0.99.....	1	126	698	64	135	225	158	637	118
Undistributed <sup>2</sup> .....	3								
South, total.....	101	2,373	10,935	2,027	4,219	8,541	30,604	45,153	4,460
Less than 0.10.....	3	13	53	11	22	41	1,039	2,217	131
0.10 to 0.19.....	8	158	666	143	338	577	3,942	5,272	332
0.20 to 0.29.....	19	529	2,796	433	1,114	1,978	11,051	14,647	1,065
0.30 to 0.39.....	11	380	1,663	341	402	1,482	4,901	7,276	413
0.40 to 0.49.....	23	706	3,049	661	1,489	2,766	6,821	9,987	2,183
0.50 to 0.59.....	12	200	756	179	322	658	1,383	2,691	140
0.60 to 0.69.....	4	52	236	38	99	162	366	594	19
0.70 to 0.79.....	3	94	368	88	194	340	477	1,112	71
0.80 to 0.89.....	3								
0.90 to 0.99.....	1								
1.00 and over.....	8								
Undistributed <sup>2</sup> .....	6	119	329	104	173	278	202	684	66
Mountain, total.....	44	122	1,019	29	66	259	422	673	40
Less than 0.10.....	2	239	1,119	212	369	987	2,805	4,019	387
0.10 to 0.19.....	1	17	55	17	34	55	402	505	16
0.20 to 0.29.....	3	23	109	20	33	99	400	489	57
0.30 to 0.39.....	8	62	262	59	108	248	768	1,086	57
0.40 to 0.49.....	6	58	302	50	80	262	647	777	90
0.50 to 0.59.....	5	28	124	23	40	105	226	438	49
0.60 to 0.69.....	3	36	175	29	48	129	268	474	67
0.70 to 0.79.....	2								
0.80 to 0.89.....	1								
0.90 to 0.99.....	3								
1.00 and over.....	3	13	66	12	22	63	63	155	23
Undistributed <sup>2</sup> .....	10	2	26	2	4	26	31	95	28
Pacific, total.....	200	1,695	10,917	1,480	2,950	9,589	22,693	33,440	3,266
Less than 0.10.....	7	11	41	11	19	41	625	857	24
0.10 to 0.19.....	6	7	17	7	10	17	108	131	10
0.20 to 0.29.....	23	280	1,359	254	445	1,179	5,327	6,294	850
0.30 to 0.39.....	33	263	1,833	230	483	1,627	5,497	6,998	453
0.40 to 0.49.....	27	314	1,969	288	552	1,812	4,391	7,179	717
0.50 to 0.59.....	24	154	836	113	209	565	1,530	2,435	195
0.60 to 0.69.....	11	149	906	113	238	736	1,389	1,945	76
0.70 to 0.79.....	12	164	1,261	153	307	1,107	1,712	2,592	194
0.80 to 0.89.....	7	61	344	51	93	338	403	709	40
0.90 to 0.99.....	6	60	494	51	125	453	530	1,300	244
1.00 and over.....	12	215	1,742	197	446	1,629	1,205	2,481	391
Undistributed <sup>2</sup> .....	32	17	115	12	23	85	( <sup>3</sup> )	519	72

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>In computing these ratios contract employment serving the establishment is excluded. The cost of contract work expressed as a percent of payroll for 1963 was: for the Dimension limestone subindustry, 13 percent; for the Dimension granite subindustry, 5 percent; for the Dimension stone, n.e.c., subindustry, 10 percent; for the Crushed and broken limestone subindustry, 10 percent; for the Crushed and broken granite subindustry, 11 percent; and for the Crushed and broken stone, n.e.c., subindustry, 10 percent.

<sup>2</sup>Represents establishments with zero or negative value added in mining; establishments with no employees; and for number of employees and payroll, figures for separately reported central offices and related facilities.

<sup>3</sup>Not shown since the cost of supplies, fuels, purchased electric energy, contract work, and purchased machinery exceeds the value of shipments and receipts plus capital expenditures.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963

Value added per employee class <sup>1</sup>	Number of employees	Number of establishments with average employment of--							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
Dimension Limestone Subindustry									
Total.....	326	61	56	5	-	-	-	-	-
Less than \$3,000.....	21	5	5	-	-	-	-	-	-
\$3,000 to \$3,999.....	47	4	3	1	-	-	-	-	-
\$5,000 to \$5,999.....	44	5	4	1	-	-	-	-	-
\$6,000 to \$6,999.....	26	5	5	-	-	-	-	-	-
\$7,000 to \$7,999.....	33	3	2	1	-	-	-	-	-
\$8,000 to \$8,999.....	42	10	10	-	-	-	-	-	-
\$9,000 to \$9,999.....	15	2	2	-	-	-	-	-	-
\$10,000 to \$12,499.....	7	2	2	-	-	-	-	-	-
\$12,500 to \$14,999.....	47	4	3	1	-	-	-	-	-
\$15,000 to \$17,499.....	46	2	2	-	-	-	-	-	-
\$20,000 and over.....	46	2	1	1	-	-	-	-	-
Undistributed <sup>2</sup> .....	5	17	17	-	-	-	-	-	-
Dimension Granite Subindustry									
Total.....	824	66	56	7	2	1	-	-	-
Less than \$3,000.....	81	9	7	2	-	-	-	-	-
\$3,000 to \$3,999.....	86	6	4	2	-	-	-	-	-
\$4,000 to \$4,999.....	52	4	3	1	-	-	-	-	-
\$5,000 to \$5,999.....	50	7	7	-	-	-	-	-	-
\$6,000 to \$6,999.....	186	8	6	1	-	1	-	-	-
\$7,000 to \$7,999.....	50	4	4	-	-	-	-	-	-
\$8,000 to \$8,999.....	2	2	-	-	-	-	-	-	-
\$10,000 to \$12,499.....	202	11	9	1	1	-	-	-	-
\$12,500 to \$14,999.....	67	4	3	-	1	-	-	-	-
\$15,000 to \$17,499.....	43	3	3	-	-	-	-	-	-
\$20,000 and over.....	43	2	2	-	-	-	-	-	-
Undistributed <sup>2</sup> .....	7	6	6	-	-	-	-	-	-
Dimension Stone, N.E.C., Subindustry									
Total.....	1,006	192	182	10	-	-	-	-	-
Less than \$3,000.....	188	44	43	1	-	-	-	-	-
\$3,000 to \$3,999.....	149	14	10	4	-	-	-	-	-
\$4,000 to \$4,999.....	215	24	22	2	-	-	-	-	-
\$5,000 to \$5,999.....	119	17	16	1	-	-	-	-	-
\$6,000 to \$6,999.....	32	3	2	1	-	-	-	-	-
\$7,000 to \$7,999.....	60	10	10	-	-	-	-	-	-
\$8,000 to \$8,999.....	57	11	11	-	-	-	-	-	-
\$9,000 to \$9,999.....	25	4	4	-	-	-	-	-	-
\$10,000 to \$12,499.....	74	18	18	-	-	-	-	-	-
\$12,500 to \$14,999.....	23	5	5	-	-	-	-	-	-
\$15,000 to \$17,499.....	23	2	2	-	-	-	-	-	-
\$20,000 and over.....	16	4	4	-	-	-	-	-	-
Undistributed <sup>2</sup> .....	48	36	35	1	-	-	-	-	-
Crushed and Broken Limestone Subindustry									
Total.....	31,095	1,612	1,121	373	92	21	4	1	-
Less than \$3,000.....	1,349	112	97	14	-	-	1	-	-
\$3,000 to \$3,999.....	519	54	46	7	1	-	-	-	-
\$4,000 to \$4,999.....	1,000	71	55	14	1	1	-	-	-
\$5,000 to \$5,999.....	1,333	84	64	16	4	-	-	-	-
\$6,000 to \$6,999.....	1,593	88	65	18	4	1	-	-	-
\$7,000 to \$7,999.....	1,074	68	49	15	4	-	-	-	-
\$8,000 to \$8,999.....	1,762	86	56	23	5	2	-	-	-
\$9,000 to \$9,999.....	1,575	79	53	18	7	1	-	-	-
\$10,000 to \$12,499.....	6,680	260	152	82	20	4	2	-	-
\$12,500 to \$14,999.....	4,108	152	81	55	9	6	1	-	-
\$15,000 to \$17,499.....	1,962	101	62	32	7	-	-	-	-
\$17,500 to \$19,999.....	2,648	94	55	26	10	2	-	1	-
\$20,000 and over.....	4,558	212	137	51	20	4	-	-	-
Undistributed <sup>2</sup> .....	934	151	149	2	-	-	-	-	-
Crushed and Broken Stone, N.E.C., Subindustry									
Total.....	8,081	494	382	85	17	10	-	-	-
Less than \$3,000.....	344	40	36	4	-	-	-	-	-
\$3,000 to \$3,999.....	73	11	11	-	-	-	-	-	-
\$4,000 to \$4,999.....	261	20	14	5	1	-	-	-	-
\$5,000 to \$5,999.....	255	26	24	1	1	-	-	-	-
\$6,000 to \$6,999.....	420	28	19	9	-	-	-	-	-
\$7,000 to \$7,999.....	321	25	21	3	1	-	-	-	-
\$8,000 to \$8,999.....	478	41	36	5	-	-	-	-	-
\$9,000 to \$9,999.....	322	25	21	3	1	-	-	-	-
\$10,000 to \$12,499.....	1,088	56	37	16	2	1	-	-	-

See footnotes at end of table.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963—Continued

Value added per employee class <sup>1</sup>	Number of employees <sup>1</sup>	Number of establishments with average employment of--							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
		Crushed and Broken Stone, N.E.C., Subindustry—Continued							
\$12,500 to \$14,999.....	641	27	17	7	2	1	-	-	-
\$15,000 to \$17,499.....	1,180	40	24	9	3	4	-	-	-
\$17,500 to \$19,999.....	357	20	15	3	2	-	-	-	-
\$20,000 and over.....	1,726	77	50	19	4	4	-	-	-
Undistributed <sup>2</sup> .....	615	58	57	1	-	-	-	-	-

Standard Notes: - Represents zero.  
n.e.c. Not elsewhere classified.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>In reporting these ratios contract employment serving the establishment is excluded. The cost of contract work expressed as a percent of payroll for 1963 was: for the Dimension Limestone Subindustry, 131 percent; for the Dimension Granite Subindustry, 5 percent; for the Dimension Stone, N.E.C., Subindustry, 10 percent; for the Crushed and Broken Granite Subindustry, 11 percent; and for the Crushed and Broken Stone, N.E.C., Subindustry, 10 percent.

<sup>2</sup>Represents establishments with no employees or with negative value added in mining and, for number of employees, includes figures for separately reported central offices and related facilities.

TABLE 11. Hourly Earnings of Production, Development, and Exploration Workers for Establishments with 10 or More Employees, by Geographic Areas: 1963

Subindustry by hourly earnings classes	Number of employees <sup>1</sup>	Number of establishments with 10 or more employees in--									
		Total	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Dimension Limestone Subindustry											
Total.....	221	11	-	1	6	1	1	-	1	-	1
\$1.00 to \$1.49.....	77	1	-	-	-	1	-	-	-	-	-
\$1.50 to \$1.99.....		3	-	1	-	-	1	-	-	-	1
\$2.00 to \$2.49.....		6	-	-	5	-	-	-	1	-	-
\$4.00 to \$4.49.....	144	1	-	-	1	-	-	-	-	-	-
Dimension Granite Subindustry											
Total.....	669	24	7	-	3	3	6	-	4	-	1
\$1.00 to \$1.49.....	70	4	-	-	-	-	3	-	1	-	-
\$1.50 to \$1.99.....	219	11	1	-	3	2	3	-	2	-	-
\$2.00 to \$2.49.....	285	5	4	-	-	-	-	-	-	-	1
\$2.50 to \$2.99.....	95	4	2	-	-	1	-	-	1	-	-
Dimension Stone, N.E.C., Subindustry											
Total.....	621	33	-	8	4	-	3	10	3	4	1
Less than \$1.00.....	361	2	-	-	-	-	-	2	-	-	-
\$1.00 to \$1.49.....		17	-	3	3	-	2	4	3	2	-
\$1.50 to \$1.99.....		172	8	-	1	-	-	1	4	-	2
\$2.00 to \$2.49.....	88	1	-	1	-	-	-	-	-	-	-
\$2.50 to \$2.99.....		4	-	3	1	-	-	-	-	-	-
\$3.00 to \$3.49.....		1	-	-	-	-	-	-	-	-	1
Crushed and Broken Limestone Subindustry											
Total.....	28,041	934	11	126	233	199	127	160	51	10	17
Less than \$1.00.....	593	30	-	3	7	6	2	9	3	-	-
\$1.00 to \$1.49.....	4,525	158	4	17	22	30	26	47	6	-	6
\$1.50 to \$1.99.....	6,698	246	3	14	34	53	62	60	19	1	-
\$2.00 to \$2.49.....	6,629	247	3	43	75	48	24	32	15	3	4
\$2.50 to \$2.99.....	4,349	136	1	24	58	29	7	6	5	3	3
\$3.00 to \$3.49.....	3,981	71	-	17	29	15	4	3	1	1	1
\$3.50 to \$3.99.....	707	23	-	6	4	10	-	-	-	-	3
\$4.00 to \$4.49.....	91	5	-	1	2	-	-	1	-	1	-
\$4.50 and over.....	468	18	-	1	2	8	2	2	2	1	-
Crushed and Broken Granite Subindustry											
Total.....	3,898	93	4	6	-	2	69	-	2	2	7
\$1.00 to \$1.49.....	141	6	-	-	-	-	6	-	-	-	-
\$1.50 to \$1.99.....	2,105	54	-	-	-	1	52	-	-	1	-
\$2.00 to \$2.49.....	1,077	16	2	4	-	-	8	-	2	-	-
\$2.50 to \$2.99.....	80	3	-	1	-	-	1	-	-	-	1
\$3.00 to \$3.49.....	398	9	1	1	-	1	-	-	-	1	5
\$3.50 to \$3.99.....	28	2	1	-	-	-	1	-	-	-	-
\$4.00 to \$4.49.....	37	2	-	-	-	-	1	-	-	-	-
\$4.50 and over.....	32	1	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

TABLE 11. **Hourly Earnings of Production, Development, and Exploration Workers for Establishments with 10 or More Employees, by Geographic Areas: 1963**—Continued

Subindustry by hourly earnings classes	Number of employees <sup>1</sup>	Number of establishments with 10 or more employees in--									
		Total	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
	Crushed and Broken Stone, N.E.C., Subindustry										
Total.....	6,659	215	15	56	9	6	42	7	16	9	55
Less than \$1.00.....	44	3	-	-	-	-	1	1	1	-	-
\$1.00 to \$1.49.....	607	18	-	1	1	-	7	-	4	-	5
\$1.50 to \$1.99.....	1,481	51	1	13	1	2	19	6	6	1	2
\$2.00 to \$2.49.....	1,202	33	1	11	3	-	7	-	4	2	5
\$2.50 to \$2.99.....	1,264	40	4	14	2	1	6	-	1	1	11
\$3.00 to \$3.49.....	605	25	6	9	1	2	1	-	-	1	5
\$3.50 to \$3.99.....	748	24	3	7	1	1	-	-	-	3	9
\$4.00 to \$4.49.....	430	13	-	1	-	-	-	-	-	1	11
\$4.50 and over.....	278	8	-	-	-	-	1	-	-	-	7

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.  
<sup>1</sup>For the Crushed and Broken Limestone and Crushed and Broken Stone, N.E.C., Subindustries, excludes figures for separately reported central offices and related facilities.

TABLE 12. Distribution of Operating Companies, by Employment Size and by Number of Establishments: 1963

Subindustry by establishment count	Number of--		Number of establishments with average employment of--									
	Operating companies	Employees	Total	0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
Dimension Limestone Subindustry												
Total.....	59	326	61	41	9	6	5	-	-	-	-	-
Multiunit companies, total.....	2	326	4	3	-	-	1	-	-	-	-	-
1 establishment <sup>1</sup> .....	1		1	-	-	-	1	-	-	-	-	-
3 or 4 establishments.....	1		3	3	-	-	-	-	-	-	-	-
Single unit companies.....	57		57	38	9	6	4	-	-	-	-	-
Dimension Granite Subindustry												
Total.....	49	824	66	24	18	14	7	2	1	-	-	-
Multiunit companies, total.....	9	590	26	2	12	3	6	2	1	-	-	-
1 establishment <sup>1</sup> .....	3	156	3	-	-	-	2	-	1	-	-	-
2 establishments.....	2	434	4	-	2	-	2	-	-	-	-	-
3 or 4 establishments.....	2		6	-	4	1	1	-	-	-	-	-
5 or 6 establishments.....	1		5	-	1	1	1	2	-	-	-	-
7 to 9 establishments.....	1		8	2	5	1	-	-	-	-	-	-
Single unit companies.....	40	234	40	22	6	11	1	-	-	-	-	-
Dimension Stone, N.E.C., Subindustry												
Total.....	181	1,006	192	135	24	23	10	-	-	-	-	-
Multiunit companies, total.....	13	224	24	13	2	7	2	-	-	-	-	-
1 establishment <sup>1</sup> .....	9	102	9	4	1	3	1	-	-	-	-	-
2 establishments.....	2	122	4	2	-	2	-	-	-	-	-	-
3 or 4 establishments.....	1		3	-	-	2	1	-	-	-	-	-
7 to 9 establishments.....	1		8	7	1	-	-	-	-	-	-	-
Single unit companies.....	168	782	168	122	22	16	8	-	-	-	-	-
Crushed and Broken Limestone Subindustry												
Total.....	1,277	31,095	1,612	449	229	443	373	92	21	4	1	-
Multiunit companies, total.....	246	<sup>2</sup> 17,327	581	89	56	166	186	64	16	3	1	-
1 establishment <sup>1</sup> .....	130	4,198	130	10	12	36	52	16	3	1	-	-
2 establishments.....	62	4,058	124	9	12	34	43	20	6	-	-	-
3 or 4 establishments.....	30	2,452	102	9	10	37	33	11	2	-	-	-
5 or 6 establishments.....	13	2,060	70	13	10	22	12	10	2	1	-	-
7 to 9 establishments.....	5	2,206	39	5	2	6	17	4	3	1	1	-
10 to 14 establishments.....	3	343	36	15	5	10	6	-	-	-	-	-
20 or more establishments.....	3	1,265	80	28	5	21	23	3	-	-	-	-
Single unit companies.....	1,031	13,768	1,031	360	173	277	187	28	5	1	-	-
Crushed and Broken Granite Subindustry												
Total.....	95	4,060	150	44	13	28	42	18	4	1	-	-
Multiunit companies, total.....	26	3,278	81	6	6	18	31	15	4	1	-	-
1 establishment <sup>1</sup> .....	13	564	13	2	1	3	3	3	1	-	-	-
2 establishments.....	7	546	14	2	-	2	7	3	-	-	-	-
3 or 4 establishments.....	4	1,183	15	-	1	2	3	5	3	1	-	-
15 to 19 establishments.....	1	595	19	1	-	5	9	4	-	-	-	-
20 or more establishments.....	1	390	20	1	4	6	9	-	-	-	-	-
Single unit companies.....	69	782	69	38	7	10	11	3	-	-	-	-
Crushed and Broken Stone, N.E.C., Subindustry												
Total.....	408	8,081	494	204	75	103	85	17	10	-	-	-
Multiunit companies, total.....	81	<sup>2</sup> 4,495	167	46	15	39	49	11	7	-	-	-
1 establishment <sup>1</sup> .....	42	742	42	9	3	14	16	-	-	-	-	-
2 establishments.....	20	983	40	13	1	11	11	2	2	-	-	-
3 or 4 establishments.....	12	973	40	8	5	7	13	7	-	-	-	-
5 or 6 establishments.....	5	1,109	27	6	2	3	9	2	5	-	-	-
7 to 9 establishments.....	2	93	18	10	4	4	-	-	-	-	-	-
Single unit companies.....	327	3,587	327	158	60	64	36	6	3	-	-	-

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Represents companies having at least one establishment classified in other industries or subindustries.<sup>2</sup>Includes figures for separately reported central offices and related facilities which were not further distributed.





## SAND AND GRAVEL

### INDUSTRY DESCRIPTION

This report shows 1963 Census of Mineral Industries statistics for establishments classified in industry 1441, Sand and Gravel. This industry represents establishments primarily engaged in operating sand and gravel pits and dredges, and in washing, screening, and otherwise preparing sand and gravel for construction and other special uses such as glassmaking, molding, and abrasives. Separate subindustry statistics are shown throughout the report for establishments primarily engaged in producing "construction sand and gravel," "glass sand," "molding sand," and "industrial sand, n.e.c."

Census figures for the Sand and Gravel Industry exclude for 1963, as for previous years, data on production by Federal, State, and local governments. According to the Bureau of Mines, "government and contractor" operations, principally of this type, produced about 28 percent of all sand and gravel in 1963. Some of the sand and gravel covered in the census, however, is for government use. At least 6 percent of all sand and gravel production reported in the census was for use by the reporting company as contractor or subcontractor on Federal, State, and local government projects.

Establishments included in the 1963 minerals census, as in previous minerals censuses, represent only establishments primarily engaged in producing sand and gravel. Establishments engaged in producing sand and gravel as a secondary activity in conjunction with the production of concrete brick and block, ready-mixed concrete, asphalt and tar paving mixtures, or other manufactured products are classified in the census of manufactures, and data for them are included only in tables 1, 2, 5, and 6 of this report. Production of sand and gravel by such operations amounted to about 57 million tons valued at about \$80 million as compared with net shipments of 558 million tons valued at \$646 million from all establishments reported which were classified in the Sand and Gravel Industry, and 8 million tons produced as secondary products in other mineral industries.

### SUMMARY OF FINDINGS

The total value of shipments of the Sand and Gravel Industry was \$678 million of which primary products of this industry amounted to \$650 million and secondary products, products purchased and resold without further processing, and receipts for services amounted to \$28 million. The principal secondary products were ready-mixed concrete, \$9 million; asphalt paving mixtures, \$4 million; and crushed and broken stone, \$3 million. Of the total value of shipments, the Construction Sand and Gravel Subindustry accounted for \$608 million; the Glass Sand Subindustry, \$29 million; the Molding Sand Subindustry, \$17 million; and the Industrial Sand, N.E.C., \$25 million.

The production index for the primary products of the Sand and Gravel Industry increased to 143 in 1963 from the 1958 level of 123. The unit value index for 1963 was 112 compared to 109 in 1958. Both indexes were computed on a basis of 1954 = 100.

The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their

activities in the production of secondary products, and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7 to 12) with product statistics (table 6) showing shipments for all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5 which shows the value of primary and secondary products shipped by establishments classified in the specified industry and also the value of net shipments of primary products of the industry produced as secondary products by establishments classified in other industries.

#### COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the Sand and Gravel Industry are not entirely comparable to statistics for the same commodities published by the Bureau of Mines. This is due primarily to the exclusion in Census statistics of sand and gravel production by Federal, State, and local governments. The most nearly comparable statistics from the two bureaus are shown in the table below. As indicated in this table, the Bureau of Mines shows separately figures for "commercial operations" and "government-and-contractor operations." Census figures include all of the first of these groups of establishments and some establishments in the second group, insofar as the latter represents contractors or subcontractors on Federal, State, or local government projects which were able to provide separate complete reports for their sand and gravel mining.

In order to provide more comparable Bureau of the Census and Bureau of Mines totals, the 1963, 1958, and 1954 census report forms included a special inquiry requesting information on the extent to which sand and gravel was produced for own use as a general contractor or subcontractor on Federal, State, and local government projects; produced under contract for Federal, State, and local governments; and all other sand and gravel produced. The data reported indicated that at least 36 million tons of sand and gravel were produced by contractors for own use as contractor or subcontractor on government projects, in addition to 40 million tons produced under contract to Federal, State, and local governments. Thus, although the Census Bureau total figure for sand and gravel produced (628 million tons) exceeds the Bureau of Mines figure for commercial operations (591 million tons) by 6 percent, when the Census figure is adjusted to exclude the 36 million tons of sand and gravel for own use on government projects, the Census total excess over that of the Bureau of Mines is less than one percent.

Other reasons for differences in the product statistics are:

- (1) The Bureau of the Census collects information on production and shipments and calculates net shipments, whereas the Bureau of Mines obtains figures on products sold or used.
- (2) The Bureau of the Census excludes small establishments whose value of products and reported costs were below \$500. The Bureau of Mines includes all reports obtained regardless of size. However, the contribution to products of such establishments which Census excludes is usually small.
- (3) Differences exist in coverage in certain areas for both collecting agencies.

## 1963 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

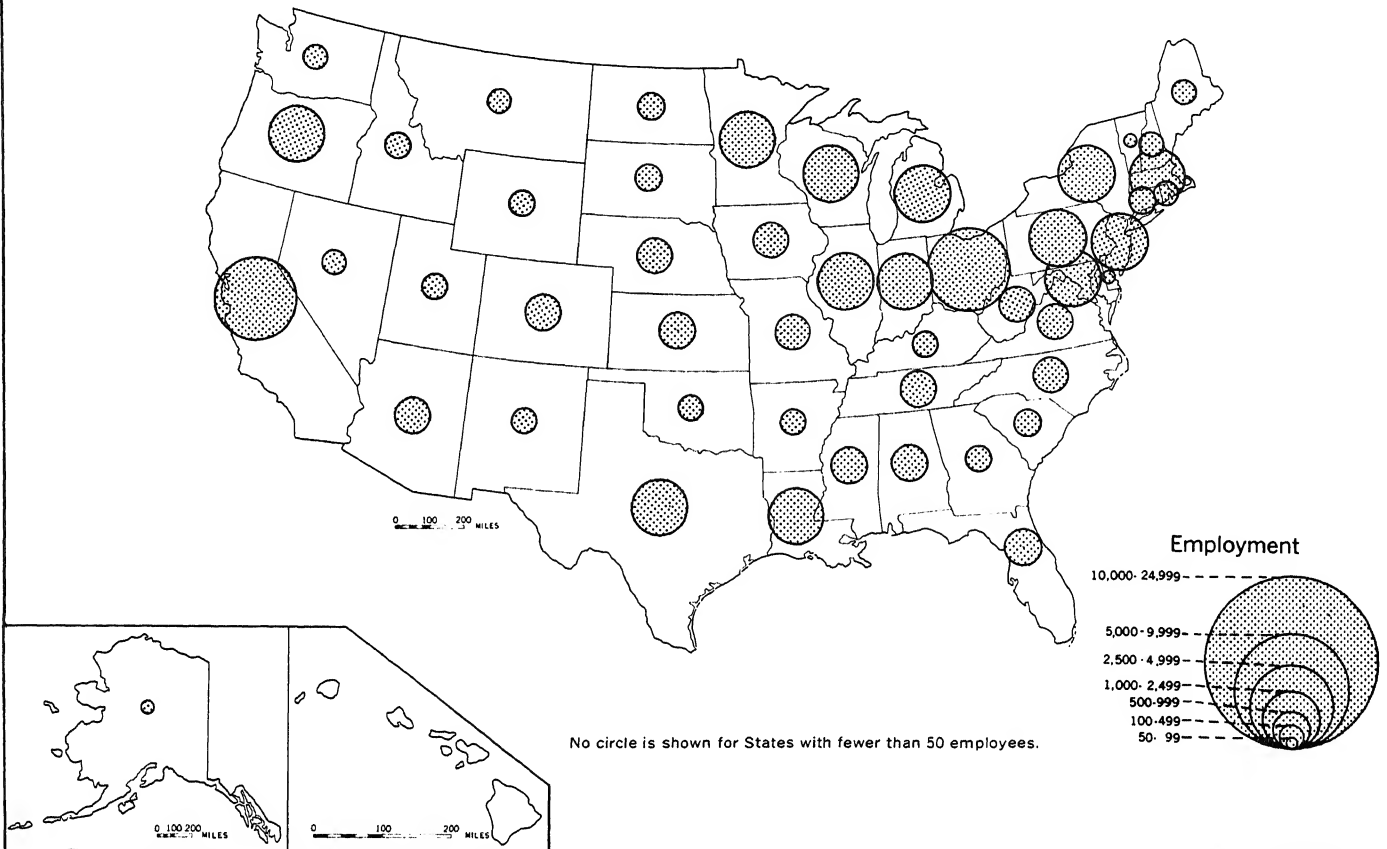
Product	Bureau of the Census statistics			Bureau of Mines statistics	
	Production  (1,000 short tons)	Shipments including interplant transfers		Sold or used by producers	
		Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
Construction sand, total.....	(NA)	(NA)	(NA)	292,879	269,934
Excluding Federal, State, and local government operations.	271,569	263,316	265,168	(NA)	(NA)
Commercial.....	(NA)	(NA)	(NA)	250,357	241,420
Government and contractor.....	(NA)	(NA)	(NA)	42,522	28,514
Glass sand.....	8,109	8,097	27,210	7,309	24,341
Molding sand.....	7,755	7,757	20,988	7,579	20,814
Industrial sand, n.e.c.....	5,520	5,528	22,693	6,211	23,411
Gravel, total.....	(NA)	(NA)	(NA)	507,872	508,772
Excluding Federal, State, and local government operations.	334,675	324,945	364,058	(NA)	(NA)
Commercial.....	(NA)	(NA)	(NA)	319,215	350,010
Government and contractor.....	(NA)	(NA)	(NA)	188,657	158,762

(NA) Not available.

n.e.c. Not elsewhere classified.

# SAND AND GRAVEL

Distribution of Employment by State: 1963



Employment and production, including mining in manufactures: 1840-1963

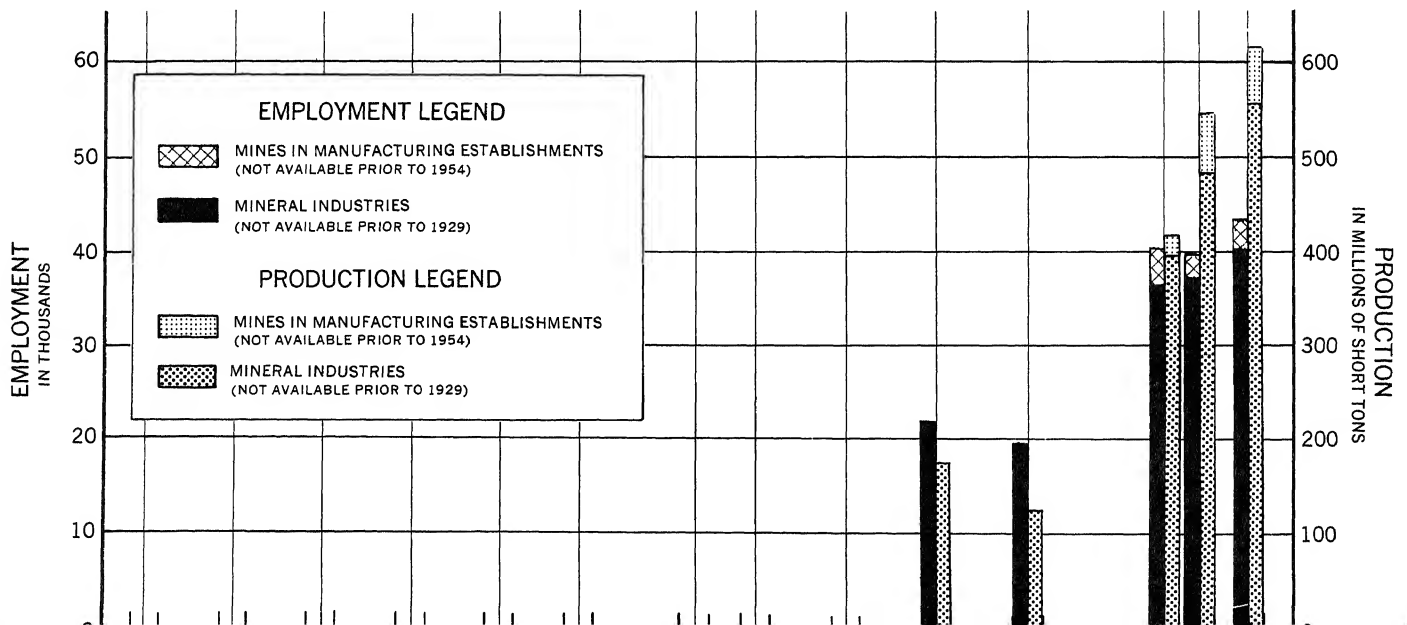


TABLE 1. General Statistics: 1963 and Earlier Years

Industry or subindustry, and year	Operating companies	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, minerals received for preparation, fuels, pur- chased elec- tric energy, and contract work	Cost of purchased machin- ery in- stalled	Value of shipments and receipts <sup>1</sup>	Value of net ship- ments and receipts	Quantity of sand and gravel  (1,000 short tons)	Capital expen- ditures	Horse- power rating of power equip- ment
		Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages								
		(number)	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)								
INDUSTRY 1441.—SAND AND GRAVEL AND SAND AND GRAVEL MINING IN MANUFACTURES																
1963, total.....	4,729	5,241	534	43,019	224,974	35,919	76,390	183,147	582,696	192,797	(NA)	757,722	746,420	614,706	(NA)	(NA)
Sand and gravel industry.....	4,141	4,616	512	40,142	212,160	33,042	71,620	170,333	513,728	182,111	57,953	678,068	666,566	557,513	75,734	4,851
Mining in manufacturing establishments.....	618	625	22	2,877	12,814	2,877	5,770	12,814	68,968	10,686	(NA)	79,654	79,654	57,193	(NA)	(NA)
1958, total.....	4,732	4,095	511	39,712	183,869	33,282	71,776	145,932	499,249	152,105	(NA)	633,241	624,641	543,650	(NA)	(NA)
Sand and gravel industry.....	4,355	3,708	484	37,159	172,757	30,729	66,674	134,820	435,439	144,792	38,499	562,138	553,548	481,928	56,594	(NA)
Mining in manufacturing establishments <sup>5</sup> .....	377	387	27	2,553	11,112	2,553	5,102	11,112	63,790	7,313	(NA)	71,103	71,103	61,722	(NA)	(NA)
1954, total.....	(NA)	(NA)	(NA)	40,307	142,313	34,372	77,802	133,956	(NA)	(NA)	(NA)	480,982	470,431	416,578	(NA)	(NA)
Sand and gravel industry.....	3,348	3,939	455	36,495	147,613	30,560	70,178	119,256	357,583	107,851	47,892	467,198	456,647	395,731	46,132	3,233
Mining in manufacturing establishments <sup>8</sup> .....	(NA)	(NA)	(NA)	2,812	14,700	2,812	7,624	14,700	(NA)	(NA)	(NA)	22,784	22,784	20,847	(NA)	(NA)
1939 <sup>9</sup> 10.....	1,253	1,569	(NA)	19,777	25,215	16,959	35,785	18,822	61,935	17,468	(NA)	(NA)	79,405	1,2547	(NA)	609
1929 <sup>10</sup> .....	(NA)	1,072	(NA)	22,028	37,015	18,061	(NA)	25,385	89,235	13,312	7,965	(NA)	112,447	179,297	(NA)	945
Construction sand and gravel and industrial sand, n.e.c., subindustries:																
1963, total.....	4,055	4,484	478	37,645	198,028	31,055	66,336	159,907	478,241	170,689	54,219	632,327	621,498	541,300	70,532	4,669
Construction sand and gravel subindustry.....	4,001	4,419	462	36,394	190,924	30,024	64,014	154,546	459,288	164,410	52,795	617,533	597,085	524,837	68,054	4,603
Industrial sand, n.e.c., subindustry.....	59	65	16	1,251	7,104	1,031	2,322	5,361	18,953	6,279	1,424	24,788	24,413	16,468	1,478	66
1958.....	3,218	3,539	449	34,275	159,815	28,367	61,927	125,181	402,671	132,392	35,307	517,422	509,768	465,059	52,848	(NA)
1954 <sup>10</sup> .....	3,204	3,764	427	34,119	138,858	28,450	65,675	111,890	334,900	100,127	46,022	436,845	(NA)	364,178	1,072	(NA)
1939 <sup>9</sup> 10.....	1,129	1,381	(NA)	17,029	21,929	14,584	31,324	16,482	53,870	15,260	(NA)	(NA)	67,130	113,745	(NA)	643
1929 <sup>10</sup> .....	(NA)	957	(NA)	19,666	33,526	15,994	(NA)	22,780	81,159	21,153	7,174	(NA)	10,432	168,886	(NA)	917
Glass sand subindustry:																
1963.....	32	39	23	1,570	9,140	1,223	2,738	6,650	22,649	7,471	2,977	29,099	28,753	5,510	3,778	101
1958.....	39	45	19	1,628	7,497	1,339	2,833	5,730	20,672	8,014	2,360	28,343	(D)	6,311	2,715	(NA)
1954.....	40	44	20	1,295	5,098	1,144	2,505	4,279	13,701	5,031	965	18,591	(NA)	9,335	1,006	5
1939.....	32	40	(NA)	1,522	2,056	1,280	2,667	1,456	4,625	1,512	(NA)	(NA)	6,137	3,175	(NA)	29
1929.....	(NA)	25	(NA)	1,125	1,592	1,030	(NA)	1,314	4,082	1,277	433	(NA)	5,329	2,187	(NA)	15
Molding sand subindustry:																
1963.....	68	93	11	927	4,992	764	1,546	3,776	12,838	3,951	757	16,642	16,315	5,396	964	81
1958.....	98	124	16	1,256	5,445	1,023	1,914	3,909	12,096	4,386	932	16,773	(D)	6,054	1,041	(NA)
1954.....	105	131	8	1,081	3,657	966	1,998	3,087	8,982	2,703	904	11,762	(NA)	6,018	827	57
1939.....	97	146	(NA)	1,226	1,230	1,095	1,794	884	3,440	696	(NA)	(NA)	4,136	5,829	(NA)	27
1929.....	(NA)	90	(NA)	1,237	1,897	1,037	(NA)	1,291	3,994	782	356	(NA)	4,776	5,124	(NA)	15

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. n.e.c. Not elsewhere classified.

<sup>1</sup>Represents the product indicated by the name of the industry or subindustry. (Industry totals for all sand and gravel therefore exceed the sum of the totals for the subindustries.) For 1963 and 1958, for the mineral industries, represents net shipments (gross shipments less sand and gravel received for preparation). For sand and gravel mining in manufactures, represents gross shipments plus production of sand and gravel for use in the same establishment in the manufacture of concrete brick and block, ready-mixed concrete, and asphalt and tar paving mixtures. For 1954, for the mineral industries, represents gross shipments. For 1939 and 1929, represents production.

<sup>2</sup>Number of production, development and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations, hence, the same figures are shown for production, development, and exploration workers and for all employees.

<sup>3</sup>Includes the estimated value of sand and gravel produced and used in the same establishment in the manufacture of concrete brick and block, ready-mixed concrete, and asphalt and tar paving mixtures.

<sup>4</sup>Represents the sum of figures shown for the separate subindustries and probably includes some duplication due to the same company operating in more than one industry or subindustry.

<sup>5</sup>Except for number of operating companies, number of establishments, and quantity of sand and gravel, excludes data for 2 establishments in Hawaii.

<sup>6</sup>Excludes the cost of sand and gravel received for preparation.

<sup>7</sup>Represents the value of shipments and receipts less the value of shipments of products purchased for resale without further processing. Not adjusted to exclude the value of sand and gravel transferred to other establishments for preparation, for this separate data are not available.

<sup>8</sup>Excludes data for 2 pits in Alaska.

<sup>9</sup>Excludes data for 2 nonproducing operations.

<sup>10</sup>Excludes data for Alaska and Hawaii. For 1939, excludes construction sand and gravel establishments that produced less than 15,000 long cubic feet of material.

TABLE 2. General Statistics by Geographic Areas and Type of Operation: 1963 and 1958

(Excludes sand and gravel operations by Federal, State, and local governments)

Industry code, industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts <sup>2</sup>	Quantity of primary products <sup>3</sup>	Capital expenditures	All employees	Value added in mining
	Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 short tons)	(\$1,000)	(number)	(\$1,000)
INDUSTRY 1441.--SAND AND GRAVEL														
TOTAL.....	4,616	512	40,142	212,160	33,042	70,620	170,333	513,728	240,064	678,068	557,513	75,724	37,159	435,439
Construction sand and gravel subindustry.....	4,419	462	36,394	190,924	30,024	64,014	154,546	459,288	217,205	607,539	534,887	68,954	34,275	440,671
Glass sand subindustry.....	39	23	1,570	9,140	1,223	2,738	6,650	22,649	10,448	29,099	5,510	3,998	1,628	20,672
Molding sand subindustry.....	93	11	927	4,992	764	1,546	3,776	12,838	4,708	16,642	5,396	904	1,256	12,096
Industrial sand, n.e.c., subindustry.....	65	16	1,251	7,104	1,031	2,322	5,361	18,953	7,703	24,788	3,724	1,868	(4)	(4)
Geographic Area														
New England, total.....	258	30	1,960	10,813	1,670	3,518	8,840	22,038	12,101	29,440	27,400	4,699	1,402	14,762
Construction sand and gravel subindustry.....	252	29	1,910	10,556	1,630	3,417	8,635	21,346	11,683	28,526	27,153	4,503	1,365	14,367
Industrial sand subindustries <sup>5</sup> ...	6	1	50	257	40	101	205	692	418	914	233	196	437	4395
Maine.....	33	1	143	485	132	282	454	899	526	1,204	1,260	221	105	907
New Hampshire.....	25	2	154	880	121	277	643	1,761	1,126	2,510	2,402	377	89	884
Vermont.....	20	1	76	247	60	127	233	355	294	590	693	59	91	670
Massachusetts.....	109	16	1,026	5,709	870	1,821	4,643	11,876	6,472	15,781	15,042	2,567	589	6,112
Rhode Island.....	17	2	138	842	117	239	705	1,321	682	1,832	1,865	171	105	1,116
Connecticut.....	54	8	423	2,650	370	772	2,162	5,826	3,001	7,523	6,138	1,304	423	5,073
Middle Atlantic, total.....	418	55	4,520	26,517	3,694	7,595	20,808	61,410	24,606	78,312	51,540	7,704	4,257	50,046
Construction sand and gravel subindustry.....	378	43	3,511	20,720	2,873	5,911	16,322	48,419	19,135	61,442	49,131	6,112	3,318	41,501
Glass sand subindustry.....	6	3	423	2,625	321	736	1,952	5,326	2,936	7,039	1,136	1,223	356	3,580
Molding sand subindustry.....	24	6	411	2,224	339	628	1,698	5,676	1,683	7,126	1,229	233	583	4,965
Industrial sand, n.e.c., subindustry.....	10	3	175	948	161	320	836	1,989	852	2,705	397	136	(4)	(4)
New York, total.....	217	19	1,701	10,819	1,330	2,637	7,940	23,488	8,228	29,128	24,273	2,588	1,753	25,375
Construction sand and gravel subindustry.....	204	19	1,612	10,227	1,284	2,561	7,720	22,773	8,017	28,254	24,060	2,536	1,646	24,740
Industrial sand subindustry <sup>5</sup> .....	13	-	89	592	46	76	220	715	211	874	183	52	107	4635
New Jersey, total.....	107	20	1,353	7,474	1,135	2,373	6,184	19,822	8,930	26,157	14,714	2,595	1,174	12,889
Construction sand and gravel subindustry.....	89	10	781	4,294	637	1,370	3,449	11,502	4,971	15,172	12,981	1,301	708	7,785
Industrial sand subindustry <sup>5</sup> .....	18	10	572	3,180	498	1,003	2,735	8,320	3,959	10,985	1,608	1,294	466	45,104
Pennsylvania, total.....	94	16	1,468	8,224	1,229	2,585	6,684	18,100	7,448	23,027	12,553	2,521	1,330	11,782
Construction sand and gravel subindustry.....	85	14	1,118	6,199	952	1,980	5,153	14,144	6,147	18,016	11,090	2,275	964	48,976
Industrial sand subindustry <sup>5</sup> .....	9	2	350	2,025	277	605	1,531	3,956	1,301	5,011	965	246	366	42,806
East North Central, total.....	1,232	99	9,027	50,268	7,123	15,129	38,580	123,570	51,947	158,263	138,717	17,254	9,700	116,602
Construction sand and gravel subindustry.....	1,175	87	7,931	43,415	6,258	13,231	33,595	104,280	45,224	134,583	128,132	14,919	8,887	105,397
Glass sand subindustry.....	8	5	252	1,531	213	459	1,283	4,944	2,319	6,078	1,589	1,187	368	6,018
Molding sand subindustry.....	36	3	335	2,012	256	552	1,392	5,178	1,672	6,396	2,393	454	445	5,187
Industrial sand, n.e.c., subindustry.....	13	4	509	3,310	396	887	2,310	9,168	2,732	11,206	1,508	694	(4)	(4)
Ohio, total.....	326	30	2,546	13,737	2,066	4,329	10,635	37,107	12,180	44,856	35,532	4,431	2,604	31,576
Construction sand and gravel subindustry.....	310	27	2,307	12,435	1,853	3,911	9,528	33,721	10,889	40,502	33,508	4,108	2,337	28,789
Industrial sand subindustry <sup>5</sup> .....	16	3	239	1,302	213	418	1,107	3,386	1,291	4,356	1,074	323	267	42,787
Indiana, total.....	192	13	1,186	6,182	941	2,147	5,267	16,007	7,218	21,091	21,944	2,134	1,335	12,917
Construction sand and gravel subindustry.....	187	13	1,151	6,025	923	2,107	5,198	15,653	7,154	20,676	21,607	2,131	(NA)	(NA)
Industrial sand subindustry <sup>5</sup> .....	5	-	35	157	18	40	69	354	64	415	333	3	(NA)	(NA)
Illinois, total.....	209	28	2,150	12,370	1,685	3,632	9,260	27,322	13,720	36,559	27,944	4,483	2,370	32,745
Construction sand and gravel subindustry.....	199	23	1,658	9,067	1,309	2,820	7,001	18,788	10,479	25,813	24,357	3,454	2,069	27,984
Industrial sand subindustries <sup>5</sup> ...	10	5	492	3,303	376	812	2,259	8,534	3,241	10,746	2,801	1,029	301	4,761
Michigan, total.....	284	18	1,915	11,163	1,463	3,063	8,246	27,996	11,294	35,420	34,711	3,870	2,102	26,024
Construction sand and gravel subindustry.....	271	16	1,713	9,696	1,313	2,656	7,244	23,173	9,856	29,931	31,334	3,098	1,990	23,714
Industrial sand subindustries <sup>5</sup> ...	13	2	202	1,467	150	407	1,002	4,823	1,438	3,489	1,108	772	112	42,310
Wisconsin, total.....	221	10	1,238	6,816	968	1,958	5,172	15,138	7,535	20,337	18,616	2,336	1,289	13,340
Construction sand and gravel subindustry.....	208	8	1,100	6,152	860	1,737	4,624	12,943	6,846	17,661	17,326	2,128	1,205	12,386
Industrial sand subindustries <sup>5</sup> ...	13	2	130	664	108	221	548	2,195	689	2,676	636	208	484	4954
West North Central, total.....	831	43	4,590	22,122	3,836	8,105	18,366	50,341	26,710	69,251	66,474	7,800	4,456	44,747
Construction sand and gravel subindustry.....	816	39	4,411	21,043	3,675	7,798	17,478	47,053	25,498	65,002	64,765	7,549	4,364	44,014
Glass sand and molding sand subindustries.....	8	2	76	428	68	138	361	1,181	507	1,613	536	75	92	733
Industrial sand, n.e.c., subindustry.....	7	2	103	651	93	169	527	2,107	705	2,636	875	176	(4)	(4)
Minnesota.....	209	8	1,182	5,854	982	1,820	4,724	11,518	6,411	16,517	17,853	1,412	1,282	14,256
Iowa.....	132	7	716	3,265	623	1,375	2,814	8,793	4,444	12,110	10,535	1,127	727	8,546

See footnotes at end of table.

**TABLE 2. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Industry code, industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts <sup>2</sup>	Quantity of primary products <sup>3</sup> (1,000 short tons)	Capital expenditures	All employees	Value added in mining
	Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)							
								(number)	(1,000)	(1,000)	(number)	(number)	(number)	(number)
INDUSTRY 1441.—SAND AND GRAVEL—Continued														
Geographic Area—Con.														
West North Central—Continued														
Missouri, total.....	93	9	679	3,512	562	1,190	2,954	9,830	4,262	12,368	9,693	1,734	758	6,300
Construction sand and gravel subindustry.....	86	7	552	2,798	457	1,010	2,325	7,736	3,428	9,601	8,648	1,563	(NA)	(NA)
Industrial sand subindustries <sup>5</sup> .....	7	2	115	717	105	180	629	2,094	834	2,767	852	161	(NA)	(NA)
North Dakota.....	40	4	237	1,249	207	454	1,099	2,576	1,587	3,768	3,469	399	447	4,137
South Dakota.....	67	4	309	1,327	275	642	1,215	2,451	1,882	3,792	3,437	641	709	6,296
Nebraska.....	162	5	887	4,152	714	1,668	3,248	8,669	4,543	11,786	11,482	1,420	709	6,296
Kansas.....	128	6	580	2,763	473	956	2,312	6,504	3,581	8,910	9,995	1,179	912	6,396
South Atlantic, total.....	357	55	4,366	20,259	3,564	8,106	15,958	51,869	24,110	68,422	51,677	7,597	4,194	43,125
Construction sand and gravel subindustry.....	339	47	3,662	16,629	3,035	6,900	13,604	44,536	21,169	58,366	43,613	6,739	43,604	43,125
Glass sand subindustry.....	9	6	586	3,125	431	945	1,978	6,573	2,115	7,968	1,234	749	663	663
Industrial sand, n.e.c., subindustry.....	9	2	118	505	98	261	376	760	826	1,488	330	98	(4)	(4)
Delaware.....	11	-	53	259	46	106	228	435	444	727	371	150	69	500
Maryland.....	56	13	1,056	5,632	875	1,984	4,574	15,441	5,713	19,560	12,919	1,594	748	7,100
Virginia, total.....	50	12	760	3,633	678	1,407	3,172	8,407	5,882	12,641	9,755	1,643	847	6,296
Construction sand and gravel subindustry.....	46	10	657	3,225	591	1,218	2,856	7,645	5,384	11,486	9,294	1,543	(NA)	(NA)
Industrial sand subindustries <sup>5</sup> .....	4	2	103	408	87	189	316	762	498	1,155	306	100	(NA)	(NA)
West Virginia, total.....	20	8	656	3,794	491	1,067	2,552	9,112	2,671	10,851	5,256	932	6,900	6,296
Construction sand and gravel subindustry.....	16	6	242	1,409	213	459	1,206	4,314	1,482	5,287	4,094	509	(NA)	(NA)
Industrial sand subindustries <sup>5</sup> .....	4	2	414	2,385	278	608	1,346	4,798	1,189	5,564	1,162	423	(NA)	(NA)
North Carolina.....	61	6	514	2,029	464	1,194	1,818	6,210	2,403	8,016	7,670	997	409	4,125
South Carolina, total.....	33	4	340	1,431	307	790	1,266	3,407	1,961	4,792	3,340	616	384	3,296
Construction sand and gravel subindustry.....	29	3	289	1,236	259	684	1,079	2,757	1,665	3,952	3,066	470	(NA)	(NA)
Industrial sand subindustries <sup>5</sup> .....	4	1	51	195	48	106	187	650	296	800	234	146	(NA)	(NA)
Georgia.....	50	5	354	1,204	292	627	926	2,995	1,702	4,040	3,920	657	403	3,125
Florida.....	76	7	633	2,277	411	931	1,422	5,862	3,334	7,835	8,446	1,361	604	6,296
East South Central, total.....	187	36	2,305	9,851	1,923	4,388	8,059	23,160	12,550	32,797	25,040	3,413	2,930	15,125
Construction sand and gravel subindustry.....	172	34	2,132	9,134	1,778	4,077	7,511	21,095	11,628	29,563	24,316	3,160	41,893	41,893
Glass sand and industrial sand, n.e.c., subindustries.....	6	2	113	502	87	192	343	1,410	584	1,775	536	219	4137	41,125
Molding sand subindustry.....	9	-	60	215	58	119	205	655	338	959	288	34	34	34
Kentucky.....	33	5	387	2,015	299	762	1,559	5,424	2,961	7,538	6,596	847	362	3,125
Tennessee, total.....	52	11	655	3,165	581	1,278	2,605	7,580	3,971	10,609	6,609	942	611	6,296
Construction sand and gravel subindustry.....	43	9	525	2,575	466	1,028	2,150	5,870	3,259	8,399	5,908	730	(NA)	(NA)
Industrial sand subindustries <sup>5</sup> .....	9	2	130	588	115	250	455	1,710	712	2,210	701	212	(NA)	(NA)
Alabama.....	49	11	612	2,226	512	1,104	1,856	5,285	2,596	7,005	5,248	876	391	2,125
Mississippi.....	53	9	648	2,447	531	1,244	2,039	4,871	3,022	7,145	6,627	743	600	6,296
West South Central, total.....	423	69	4,494	18,749	3,782	8,587	15,614	47,677	26,924	66,870	52,581	7,731	4,414	43,125
Construction sand and gravel subindustry.....	406	63	4,183	17,321	3,505	7,898	14,410	43,658	24,050	60,681	50,587	7,027	44,294	44,125
Glass sand subindustry.....	3	2	53	280	45	108	212	661	667	1,009	256	219	140	1,125
Molding sand subindustry.....	5	1	69	287	63	134	253	429	658	990	250	99	99	99
Industrial sand, n.e.c., subindustry.....	9	3	189	861	169	447	739	2,929	1,549	4,190	1,096	388	(4)	(4)
Arkansas.....	57	7	466	1,966	422	953	1,741	4,547	3,001	6,393	6,092	1,155	339	2,125
Louisiana.....	87	23	1,205	4,545	986	2,246	3,841	12,214	7,881	18,033	14,360	2,062	1,223	11,125
Oklahoma.....	56	5	385	1,613	334	845	1,379	5,038	1,976	6,247	5,046	767	433	4,125
Texas, total.....	223	34	2,438	10,625	2,040	4,543	8,653	25,878	14,066	36,197	27,083	3,747	2,409	25,125
Construction sand and gravel subindustry.....	213	32	2,308	10,008	1,931	4,308	8,172	24,574	12,663	33,766	27,891	3,471	(NA)	(NA)
Industrial sand subindustries <sup>5</sup> .....	10	2	130	617	109	235	481	1,304	1,403	2,431	403	276	(NA)	(NA)
Mountain, total.....	342	25	2,428	12,007	2,167	4,240	10,491	28,213	14,263	38,219	34,060	4,257	1,399	30,125
Construction sand and gravel subindustry.....	332	24	2,368	11,652	2,114	4,118	10,181	27,245	13,872	37,024	33,722	4,093	41,213	41,125
Industrial sand subindustries <sup>5</sup> .....	10	1	60	355	53	122	310	968	391	1,195	293	164	496	496

See footnotes at end of table.



**TABLE 2. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Industry code, industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Cost of supplies, etc., and purchased machinery installed (\$1,000)	Value of shipments and receipts <sup>2</sup> (\$1,000)	Quantity of primary products <sup>3</sup> (1,000 short tons)	Capital expenditures (\$1,000)	All employees (number)	Value added in mining (\$1,000)
	Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)							
INDUSTRY 1441.—SAND AND GRAVEL—Continued														
Geographic Area—Con.														
Mountain—Continued														
Montana.....	43	-	185	881	169	336	824	2,036	1,258	2,783	2,541	511	192	3,467
Idaho.....	28	-	107	542	102	201	516	1,133	602	1,570	1,263	165	178	1,760
Wyoming.....	25	1	125	558	119	238	552	1,501	717	1,891	2,030	327	94	1,053
Colorado.....	89	5	601	3,302	535	1,040	2,847	8,115	4,217	11,365	10,084	967	457	5,639
New Mexico.....	50	5	326	1,621	299	601	1,512	3,432	2,002	4,844	3,951	590	309	3,769
Arizona.....	37	7	594	2,787	505	989	2,250	6,189	2,551	7,900	6,977	840	108	993
Utah.....	39	4	333	1,513	303	547	1,353	3,758	1,790	5,070	5,236	478	379	12,030
Nevada.....	31	2	157	803	135	288	637	2,049	1,126	2,796	1,978	379	152	1,796
Pacific, total.....	568	98	6,452	41,574	5,283	10,952	33,617	105,449	46,853	136,993	110,024	15,309	4,838	74,029
Construction sand and gravel subindustry.....	549	95	6,286	40,454	5,156	10,664	32,810	101,656	44,948	131,752	108,570	14,852	4,707	471,074
Glass sand subindustry.....	7	2	99	728	83	198	588	2,916	1,624	4,184	923	356	131	2,955
Molding sand subindustry.....	5	-	8	36	7	14	29	66	89	142	35	13		
Industrial sand, n.e.c., subindustry.....	7	1	59	356	37	76	190	811	192	915	196	88	(4)	(4)
Washington.....	91	7	494	3,227	417	845	2,917	7,661	5,113	10,933	10,035	1,841	427	5,942
Oregon.....	86	11	1,121	6,634	839	1,637	4,747	10,201	5,335	13,486	9,683	2,050	532	5,059
California, total.....	374	80	4,766	31,328	3,962	8,340	25,595	86,110	35,933	110,774	89,475	11,269	3,768	62,057
Construction sand and gravel subindustry.....	358	77	4,615	30,294	3,847	8,101	24,860	82,625	34,309	106,095	88,260	10,839	4,645	459,282
Industrial sand subindustries <sup>5</sup> .....	16	3	151	1,034	115	239	735	3,485	1,624	4,679	1,087	430	123	42,775
Alaska and Hawaii.....	17	-	71	385	65	130	358	1,477	472	1,800	831	149	111	971
SAND AND GRAVEL MINING IN MANUFACTURING ESTABLISHMENTS														
TOTAL.....	625	22	72,877	712,814	72,877	5,770	12,814	68,968	10,686	79,654	57,193	(NA)	<sup>7</sup> 82,553	<sup>8</sup> 63,790
New England.....	32	2	110	568	110	223	568	3,249	450	3,699	4,473	(NA)	127	3,342
Massachusetts.....	7	1	68	352	68	136	352	1,982	220	2,202	2,498	(NA)	82	2,566
Connecticut.....	13	1	26	146	26	53	146	722	144	866	1,355	(NA)	23	430
Middle Atlantic.....	67	2	412	1,773	412	825	1,773	9,042	1,787	10,829	7,376	(NA)	284	6,765
New York.....	27	-	241	1,097	241	482	1,097	4,718	1,278	5,996	4,195	(NA)	134	4,957
New Jersey.....	9	-	35	188	35	70	188	1,583	142	1,725	1,383	(NA)		
Pennsylvania.....	31	2	136	488	136	273	488	2,741	367	3,108	1,798	(NA)	150	1,808
East North Central.....	113	7	469	2,078	469	940	2,078	11,928	1,351	13,279	7,061	(NA)	342	10,858
Ohio.....	40	2	80	398	80	160	398	2,108	261	2,369	1,773	(NA)	70	1,928
Indiana.....	9	1	79	318	79	159	318	1,898	212	2,110	1,085	(NA)	72	1,213
Illinois.....	23	1	166	714	166	332	714	4,030	446	4,476	1,065	(NA)	69	4,024
Michigan.....	24	2	82	399	82	164	399	2,401	266	2,667	1,491	(NA)	66	2,407
Wisconsin.....	17	1	62	249	62	125	249	1,491	166	1,657	1,647	(NA)	65	1,286
West North Central.....	71	1	144	614	144	286	614	3,464	440	3,904	2,811	(NA)	210	3,737
Minnesota.....	23	1	48	234	48	95	234	1,180	160	1,340	900	(NA)	76	1,528
Iowa.....	13	-	26	101	26	51	101	528	61	589	465	(NA)	16	433
Missouri.....	13	-	21	73	21	41	73	612	97	709	583	(NA)	19	(NA)
Kansas.....	8	-	21	87	21	41	87	483	46	529	268	(NA)	47	(NA)
South Atlantic.....	76	-	206	879	206	413	879	3,800	457	4,257	3,450	(NA)	229	5,873
Delaware.....	4	-	16	82	16	33	82	500	53	553	356	(NA)	(NA)	(NA)
Maryland.....	7	-	98	429	98	195	429	1,313	163	1,476	1,202	(NA)	(NA)	(NA)
Virginia.....	6	-	24	98	24	48	98	540	40	580	354	(NA)	(NA)	(NA)
North Carolina.....	15	-	21	86	21	43	86	487	54	541	391	(NA)	(NA)	(NA)
East South Central.....	26	3	114	442	114	226	442	2,012	268	2,280	1,779	(NA)	70	1,692
Tennessee.....	5	2	51	202	51	101	202	799	74	873	945	(NA)	47	1,078
Alabama.....	11	1	46	172	46	91	172	853	154	1,007	543	(NA)	(NA)	(NA)
West South Central.....	52	3	170	627	170	340	627	3,868	667	4,535	3,446	(NA)	368	5,490
Oklahoma.....	5	-	21	84	21	42	84	472	53	525	267	(NA)	(NA)	(NA)
Texas.....	29	3	130	479	130	260	479	2,972	571	3,543	2,857	(NA)	184	2,554
Mountain.....	70	3	570	2,728	570	1,151	2,728	15,157	2,042	17,199	12,029	(NA)	477	12,796
Idaho.....	8	-	88	353	88	176	353	1,989	221	2,210	1,514	(NA)	34	1,342
Colorado.....	17	-	69	375	69	139	375	2,129	185	2,314	1,876	(NA)	63	2,343
New Mexico.....	8	1	85	441	85	170	441	2,480	276	2,756	2,418	(NA)	50	2,057
Arizona.....	11	2	225	1,049	225	460	1,049	5,723	636	6,359	3,642	(NA)	282	5,287
Utah.....	11	-	27	140	27	55	140	724	100	824	664	(NA)	27	(NA)
Nevada.....	5	-	57	287	57	113	287	1,717	585	2,302	1,598	(NA)	(NA)	(NA)
Pacific.....	118	1	682	3,105	682	1,366	3,105	16,448	3,224	19,672	14,768	(NA)	8446	813,237
Washington.....	22	-	121	558	121	242	558	2,862	345	3,207	2,525	(NA)	90	3,215
California.....	79	1	449	2,039	449	899	2,039	10,514	2,417	12,931	9,983	(NA)	285	7,629

See footnotes at end of table.

TABLE 2. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Industry code, industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts <sup>2</sup>	Quantity of primary products <sup>3</sup> (1,000 short tons)	Capital expenditures	All employees	Value added in mining
	Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)							
	(number)	(number)	(number)	(number)	(number)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000 short tons)	(\$1,000)	(number)	(\$1,000)
1441.—SAND AND GRAVEL INDUSTRY														
Type of Operation														
Construction sand and gravel subindustry:														
Producing establishments, total.....	4,372	461	1036,173	10190,000	29,824	63,647	153,729	459,716	216,415	607,539	534,887	68,592	41034,128	4401,640
Bank:														
Mining only.....	308	7	845	3,320	722	1,433	2,927	9,966	4,800	12,855	11,312	1,913	645	10,018
Mining with preparation:														
Screening only.....	96	6	564	2,216	470	1,016	1,822	4,925	3,791	7,627	6,711	1,089	3,843	42,036
Crushing only.....	45	6	357	1,396	302	598	1,156	4,097	2,048	5,462	4,861	685		
Washing and other preparation methods.....	314	30	2,973	17,884	2,422	5,074	14,102	41,320	18,847	52,584	46,274	7,583		
Bank and wet pit.....	213	36	2,364	12,131	1,978	4,592	9,665	28,006	14,206	37,982	33,804	4,232	5,305	60,661
Bank and dry pit.....	244	45	2,883	15,164	2,570	5,162	14,411	45,588	17,451	57,653	50,158	5,386	2,437	30,819
Wet pit:														
Mining only.....	64	1	252	1,185	245	500	1,131	3,662	2,098	4,458	3,923	1,302	76	617
Mining with preparation:														
Screening only.....	101	10	872	3,493	743	1,547	3,044	9,088	4,143	12,018	10,576	1,213	3,051	32,415
Crushing only.....	78	6	591	2,493	512	1,014	2,202	5,343	2,115	6,672	5,871	786		
Washing and other preparation methods.....	727	85	6,337	32,440	5,461	12,020	28,151	87,863	37,872	114,563	100,839	11,172		
Dry pit:														
Mining only.....	307	8	900	2,960	774	1,518	2,597	8,169	4,167	10,282	9,048	2,091	1,719	27,571
Mining with preparation:														
Screening only.....	327	9	1,144	4,700	971	2,006	4,079	11,937	5,907	16,129	14,194	1,715	8,078	106,013
Crushing only.....	162	11	1,092	4,413	919	1,907	3,946	12,203	7,315	17,511	15,410	2,007		
Washing and other preparation methods.....	933	117	8,113	45,281	6,819	14,674	37,378	117,905	55,481	157,432	138,540	15,958		
River, lake or ocean:														
Mining only.....	25	-	87	507	81	184	465	1,112	1,078	1,652	1,453	538	183	1,732
Mining with preparation:														
Screening only.....	39	6	392	2,087	352	756	1,928	5,362	1,964	6,681	5,879	647	2,876	29,061
Crushing only.....	19	3	181	602	154	315	553	1,289	1,653	542	1,455	179		
Washing and other preparation methods.....	249	45	3,406	19,596	2,714	5,867	15,291	40,377	18,591	53,491	47,072	5,427		
Preparation plants only.....	25	6	362	1,944	321	623	1,674	4,020	2,688	5,856	5,153	852	69	851
All other producing establishments.....	96	24	1,563	8,737	1,294	2,841	7,227	17,459	11,311	24,955	22,354	3,817	115,216	1159,846
Nonproducing establishments.....	47	1	221	924	220	367	817	(12)	790	-	-	462	36	60
Glass sand subindustry:														
Dry pit (mining with preparation).....	23	16	1,098	6,284	906	1,991	4,869	17,168	6,842	21,567	4,076	2,443	992	11,584
All other establishments.....	16	6	10472	102,856	317	747	1,781	5,480	3,606	7,532	434	1,555	636	9,088
Molding sand subindustry:														
Bank (producing establishments)....	28	2	171	661	152	273	590	1,810	575	2,272	736	113	363	3,400
Dry pit (producing establishments)....	49	5	434	2,474	373	837	2,036	7,791	2,875	10,032	3,250	596	467	4,509
All other establishments.....	16	4	10322	101,857	239	436	1,150	3,237	1,258	4,338	1,410	195	10426	4,187
Industrial sand, n.e.c., subindustry:														
Bank.....	11	1	62	295	56	123	266	757	459	1,063	160	153	(4)	(4)
Dry pit.....	29	7	680	3,706	553	1,097	2,893	10,796	3,822	13,674	2,054	942	(4)	(4)
All other establishments.....	25	8	509	3,103	422	1,102	2,202	7,400	3,422	10,051	1,510	773	(4)	(4)

Standard Notes: - Represents zero.  
n.e.c. Not elsewhere classified.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>General statistics for all States in the Sand and Gravel Industry, except Alaska and Hawaii, are shown separately in this table. For 1963, the number of establishments in Alaska was 11 and total employment was in the range 50-99; for Hawaii, the number of establishments was 6 and total employment was in the range 10-19. For sand and gravel mining in manufacturing establishments a number of States are not shown separately in this table to avoid disclosing figures for individual companies or because of the relatively small size of the statistics. Such States are shown below for 1963, with the number of establishments in each State (and in parentheses the number of employees or employment size range): Maine, 6 (0-4); New Hampshire, 1 (0-4); Vermont, 4 (0-4); Rhode Island, 1 (0-4); North Dakota, 3 (10); South Dakota, 5 (11); Nebraska, 6 (7); Maryland, 7 (98); West Virginia, 5 (11); South Carolina, 7 (2); Georgia, 12 (5-9); Florida, 20 (20-49); Kentucky, 9 (10-19); Mississippi, 1 (0-4); Arkansas, 8 (12); Louisiana, 10 (7); Montana, 4 (6); Wyoming, 6 (13); Oregon, 15 (50-99); and Alaska, 2 (20-49).

<sup>2</sup>For sand and gravel mining in manufacturing establishments includes the estimated value of sand and gravel produced and used in the same establishment in making concrete block and block, ready-mixed concrete, and other manufactured products.

<sup>3</sup>Represents the product indicated by the name of the industry or subindustry. For the mineral industries represents net shipments (gross shipments less sand and gravel received for preparation). For sand and gravel mining in manufactures, represents gross shipments plus production of sand and gravel for use in the same establishment in the manufacture of concrete brick and block, ready-mixed concrete, and asphalt and tar paving mixtures.

<sup>4</sup>Figures for the Industrial Sand, N.E.C., Subindustry are included with those for the Construction Sand and Gravel Subindustry.

<sup>5</sup>Represents the Glass Sand, Molding Sand, and Industrial Sand, N.E.C., Subindustries. No establishments in the Glass Sand Subindustry were reported for New England in 1963.

<sup>6</sup>Represents the Glass Sand and Molding Sand Subindustries. No establishments in the Molding Sand Subindustry were reported for 1963.

<sup>7</sup>Number of production, development, and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations, hence, the same figures are shown for production, development, and exploration workers and for all employees.

<sup>8</sup>Excludes data for Hawaii.

<sup>9</sup>Not entirely comparable with the 1963 figures, since the classification of certain establishments was changed after 1958 from sand and gravel to crushed stone.

<sup>10</sup>Includes data for separately reported central offices and related facilities. These were not distributed by detailed types of operation.

TABLE 3A. Detailed Statistics, by Geographic Areas: 1963

Item	United States, total	New England			Middle Atlantic			
		Division	Massachusetts	Connecticut	Division	New York	New Jersey	Pennsylvania
Establishments, total.....number..	4,616	258	109	54	418	217	107	94
With 0 to 19 employees.....do....	4,104	228	93	46	363	198	87	78
With 20 to 99 employees.....do....	492	30	16	8	51	18	20	13
With 100 employees and over.....do....	20	-	-	-	4	1	-	3
Net shipments of sand and gravel <sup>1</sup> .....1,000 short tons..	557,513	27,400	15,042	6,138	51,540	24,273	14,714	12,553
Value of shipments and receipts, total.....\$1,000..	678,068	29,440	15,781	7,523	78,312	29,128	26,157	23,027
Sand and gravel transferred to other establishments for preparation and resales.....do....	11,502	765	491	233	1,185	553	364	268
Net shipments and receipts.....do....	666,566	28,675	15,290	7,290	77,127	28,575	25,793	22,759
Value added in mining.....do....	513,728	22,038	11,876	5,826	61,410	23,488	19,822	18,100
Persons in industry, total.....number..	42,667	2,037	1,047	441	4,667	1,767	1,386	1,514
Production, development, and exploration workers, average for the year.....do....	33,042	1,670	870	370	3,694	1,330	1,135	1,229
Other employees.....do....	7,100	290	156	53	826	371	218	237
Proprietors and firm members.....do....	2,525	77	21	18	147	66	33	48
Performing manual labor.....do....	2,220	71	20	15	133	56	33	44
Man-hours worked by production, development, and exploration workers, total.....1,000..	70,620	3,518	1,821	772	7,595	2,637	2,373	2,585
At mining operations, total.....do....	43,735	2,130	1,202	445	4,460	1,889	1,282	1,289
Underground.....do....	209	-	-	-	106	78	-	22
Open-pit or bank.....do....	36,433	1,747	1,006	369	3,661	1,534	992	1,135
Surface.....do....	7,093	383	196	76	699	277	290	132
At preparation plants.....do....	26,885	1,388	619	327	3,135	748	1,091	1,296
Man-hours spent on development and exploration work (included above).....do....	1,050	15	8	7	11	10	1	-
Principal expenses designated below, total.....\$1,000..	394,271	19,161	10,081	4,669	45,554	17,402	14,461	13,691
Wages of production, development, and exploration workers.....do....	170,333	8,840	4,643	2,162	20,808	7,940	6,184	6,684
Salaries of all other employees.....do....	41,827	1,973	1,066	488	5,709	2,879	1,290	1,540
Supplies.....do....	103,787	4,439	2,453	1,023	10,461	3,601	3,931	3,036
Sand and gravel received for preparation.....do....	3,821	484	352	91	360	253	-	-
Purchases for resale.....do....	5,832	317	142	157	473	198	225	50
Purchased fuel.....do....	29,269	1,454	822	336	3,579	1,059	1,426	1,094
Purchased electric energy.....do....	17,046	630	293	191	2,128	635	895	598
Contract work.....do....	22,356	1,024	310	221	2,036	839	508	689
Purchased machinery installed.....do....	57,953	3,753	2,100	982	5,569	1,643	1,945	1,981
Capital expenditures, total.....do....	75,724	4,699	2,567	1,304	7,704	2,588	2,595	2,521
Development and exploration of mineral property.....do....	1,191	42	22	9	231	124	56	51
Preparation plant and other construction.....do....	14,237	1,201	636	428	1,434	537	278	619
New machinery and equipment.....do....	49,859	2,277	1,045	678	5,237	1,494	2,119	1,624
Used plant and equipment.....do....	10,437	1,179	864	189	802	433	142	227
Energy used.....million kwh. equivalent..	10,176	425	272	107	1,226	261	562	403
Coal.....1,000 short tons..	157	-	-	(2)	12	(2)	(2)	12
Fuel oil <sup>2</sup> .....1,000 barrels..	1,479	117	89	28	181	40	84	57
Gas.....million cu. ft..	2,958	(2)	(2)	(2)	537	40	394	103
Gasoline.....1,000 gallons..	25,743	1,455	601	551	2,446	1,009	664	773
Other fuels.....\$1,000..	4,039	47	37	5	512	41	383	88
Undistributed.....do....	10,498	523	296	121	1,288	381	513	394
Electric energy purchased.....million kwh..	1,067	34	17	9	134	41	56	37
Electric energy generated and used.....do....	38	-	-	-	1	-	1	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	4,851	263	114	88	455	204	136	115
Per production worker.....hp..	147	157	131	238	123	153	120	94
Prime movers.....1,000 hp..	3,816	216	92	77	347	158	105	84
Electric motors driven by purchased energy.....do....	1,035	47	22	11	108	46	31	31
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	38	-	-	-	4	-	2	2

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Geographic Areas: 1963—Continued

Item	East North Central						West North Central		
	Division	Ohio	Indiana	Illinois	Michigan	Wisconsin	Division	Minnesota	Iowa
Establishments, total.....number..	1,232	326	192	209	284	221	831	209	132
With 0 to 19 employees.....do....	1,133	296	179	181	266	211	788	201	125
With 20 to 99 employees.....do....	95	30	13	26	16	10	42	7	7
With 100 employees and over.....do....	4	-	-	2	2	-	1	1	-
Net shipments of sand and gravel <sup>1</sup> .....1,000 short tons..	138,717	35,532	21,944	27,944	34,711	18,616	66,474	17,853	10,535
Value of shipments and receipts, total.....\$1,000..	158,263	44,856	21,091	36,559	35,420	20,337	69,251	16,517	12,110
Sand and gravel transferred to other establishments for preparation and resales.....do....	2,830	1,204	374	440	422	390	1,177	283	111
Net shipments and receipts.....do....	155,433	43,652	20,717	36,119	34,998	19,947	68,074	16,234	11,999
Value added in mining.....do....	123,570	37,107	16,007	27,322	27,996	15,138	50,341	11,518	8,793
Persons in industry, total.....number..	9,783	2,703	1,309	2,275	2,125	1,383	5,184	1,311	788
Production, development, and exploration workers, average for the year.....do....	7,123	2,066	941	1,685	1,463	968	3,836	982	623
Other employees.....do....	1,904	480	245	465	452	270	754	200	93
Proprietors and firm members.....do....	756	157	123	125	206	145	594	129	72
Performing manual labor.....do....	648	135	110	111	170	122	582	110	67
Man-hours worked by production, development, and exploration workers, total.....1,000..	15,129	4,329	2,147	3,632	3,063	1,956	8,105	1,820	1,375
At mining operations, total.....do....	9,540	2,573	1,239	2,268	2,134	1,326	5,699	1,186	888
Underground.....do....	28	18	7	3	-	-	41	-	-
Open-pit or bank.....do....	7,910	2,144	1,026	1,644	1,921	1,175	4,497	867	723
Surface.....do....	1,602	411	206	621	213	151	1,161	319	165
At preparation plants.....do....	5,589	1,756	908	1,364	926	632	2,406	634	487
Man-hours spent on development and exploration work (included above).....do....	193	64	22	70	8	29	196	3	1
Principal expenses designated below, total.....\$1,000..	88,566	22,285	11,315	22,229	20,034	12,703	42,224	10,956	6,709
Wages of production, development, and exploration workers.....do....	38,580	10,635	5,267	9,260	8,246	5,172	18,366	4,724	2,814
Salaries of all other employees.....do....	11,688	3,102	915	3,110	2,917	1,644	3,756	1,130	451
Supplies.....do....	18,900	4,163	2,604	5,834	3,844	2,543	9,128	2,349	1,996
Sand and gravel received for preparation.....do....	627	313	313	451	270	532	1,046	650	84
Purchases for resale.....do....	1,902	336	313	451	270	532	1,046	650	84
Purchased fuel.....do....	6,731	1,606	700	1,578	1,636	1,211	4,035	992	587
Purchased electric energy.....do....	4,661	1,336	675	1,143	1,130	377	1,547	308	372
Contract work.....do....	5,477	794	841	853	1,765	1,224	3,742	803	405
Purchased machinery installed.....do....	13,649	3,632	2,085	3,861	2,423	1,648	6,608	1,309	1,000
Capital expenditures, total.....do....	17,254	4,431	2,134	4,483	3,870	2,336	7,800	1,412	1,127
Development and exploration of mineral property.....do....	252	83	18	37	40	74	153	22	36
Preparation plant and other construction.....do....	4,336	978	401	1,442	1,112	403	1,477	208	173
New machinery and equipment.....do....	10,807	2,735	1,418	2,664	2,389	1,601	5,079	930	782
Used plant and equipment.....do....	1,859	635	297	340	329	258	1,091	252	136
Energy used.....million kwh. equivalent..	2,586	526	278	888	561	333	1,085	229	165
Coal.....1,000 short tons..	59	1	(2)	54	4	(2)	2	(2)	1
Fuel oil <sup>2</sup> .....1,000 barrels..	385	68	74	82	89	72	160	41	20
Gas.....million cu. ft..	818	308	2	179	328	1	430	3	50
Gasoline.....1,000 gallons..	7,249	1,870	630	1,808	1,140	1,801	4,400	1,065	528
Other fuels.....\$1,000..	421	162	73	32	89	65	247	63	53
Undistributed.....do....	2,432	578	252	568	589	445	1,453	357	211
Electric energy purchased.....million kwh..	267	60	49	66	71	21	92	17	25
Electric energy generated and used.....do....	24	2	-	22	-	-	1	-	1
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	1,120	334	139	226	229	192	615	149	111
Per production worker.....hp..	157	162	148	134	157	198	160	152	178
Prime movers.....1,000 hp..	835	246	91	172	164	162	500	127	85
Electric motors driven by purchased energy.....do....	285	88	48	54	65	30	115	22	26
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	18	6	-	10	-	2	4	1	2

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Geographic Areas: 1963—Continued

Item	West North Central--Continued			South Atlantic					
	Missouri	Nebraska	Kansas	Division	Maryland	Virginia	West Virginia	North Carolina	Florida
Establishments, total.....number..	93	162	128	357	56	50	20	61	76
With 0 to 19 employees.....do....	84	157	122	302	43	38	12	55	69
With 20 to 99 employees.....do....	9	5	6	51	12	11	7	6	7
With 100 employees and over.....do....	-	-	-	4	1	1	1	-	-
Net shipments of sand and gravel <sup>1</sup> .....1,000 short tons..	9,693	11,482	9,995	51,677	12,919	9,755	5,256	7,670	8,446
Value of shipments and receipts, total.....\$1,000..	12,368	11,786	8,910	68,422	19,560	12,641	10,851	8,016	7,835
Sand and gravel transferred to other establishments for preparation and resales.....do....	273	203	233	1,289	400	181	-	-	-
Net shipments and receipts.....do....	12,095	11,583	8,677	67,133	19,160	12,460	10,851	8,016	7,835
Value added in mining.....do....	9,830	8,669	6,504	51,869	15,441	8,407	9,112	6,210	5,862
Persons in industry, total.....number..	744	1,019	694	4,525	1,082	772	658	547	669
Production, development, and exploration workers, average for the year.....do....	562	714	473	3,564	875	678	491	464	411
Other employees.....do....	117	173	107	802	181	82	165	50	222
Proprietors and firm members.....do....	65	132	114	159	26	12	2	31	36
Performing manual labor.....do....	56	115	97	132	22	12	2	27	32
Man-hours worked by production, development, and exploration workers, total.....1,000..	1,190	1,668	956	8,106	1,984	1,407	1,067	1,194	931
At mining operations, total.....do....	789	1,343	642	4,601	1,066	750	488	682	655
Underground.....do....	37	2	-	-	-	-	-	-	-
Open-pit or bank.....do....	565	1,158	570	3,850	829	731	377	675	515
Surface.....do....	187	183	72	751	187	19	111	7	140
At preparation plants.....do....	401	325	314	3,505	918	657	579	512	276
Man-hours spent on development and exploration work (included above).....do....	125	1	60	100	19	20	-	-	59
Principal expenses designated below, total.....\$1,000..	6,353	7,458	5,609	38,792	10,347	8,266	5,758	4,000	4,767
Wages of production, development, and exploration workers.....do....	2,954	3,248	2,312	15,958	4,574	3,172	2,552	1,818	1,422
Salaries of all other employees.....do....	558	904	451	4,301	1,058	461	1,242	211	855
Supplies.....do....	1,218	1,400	1,190	11,531	3,493	3,268	1,220	1,363	1,000
Sand and gravel received for preparation.....do....	204	-	-	753	-	-	-	-	-
Purchases for resale.....do....	66	220	26	415	110	37	106	20	-
Purchased fuel.....do....	565	692	499	3,100	512	837	382	311	295
Purchased electric energy.....do....	278	297	166	1,803	400	233	233	227	347
Contract work.....do....	510	697	965	1,531	200	258	23	50	848
Purchased machinery installed.....do....	1,421	1,237	735	4,977	998	1,249	707	432	844
Capital expenditures, total.....do....	1,724	1,426	1,175	7,557	1,594	1,648	932	597	1,361
Development and exploration of mineral property.....do....	40	17	20	64	16	9	1	2	20
Preparation plant and other construction.....do....	466	317	136	1,366	278	332	120	128	237
New machinery and equipment.....do....	1,059	838	789	5,375	1,179	1,180	679	443	943
Used plant and equipment.....do....	159	254	230	752	121	121	132	24	161
Energy used.....million kwh. equivalent..	257	127	126	1,228	247	302	203	107	158
Coal.....1,000 short tons..	1	(2)	(2)	23	5	5	11	2	(2)
Fuel oil <sup>2</sup> .....1,000 barrels..	33	9	18	208	53	15	33	12	58
Gas.....million cu. ft..	330	(2)	46	74	24	(2)	3	44	(2)
Gasoline.....1,000 gallons..	353	661	549	2,022	277	308	95	387	228
Other fuels.....\$1,000..	51	35	33	853	163	577	(2)	8	15
Undistributed.....do....	203	249	181	1,160	166	301	138	112	106
Electric energy purchased.....million kwh..	17	18	9	116	22	14	25	15	21
Electric energy generated and used.....do....	-	-	-	4	-	-	-	-	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	75	101	84	496	126	89	28	67	87
Per production worker.....hp..	133	141	178	139	144	131	57	126	212
Prime movers.....1,000 hp..	57	82	70	388	96	69	23	55	69
Electric motors driven by purchased energy.....do....	18	19	14	108	30	20	5	12	18
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	-	-	1	4	-	-	4	-	-

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Geographic Areas: 1963—Continued

Item	East South Central					West South Central				
	Division	Kentucky	Tennessee	Alabama	Mississippi	Division	Arkansas	Louisiana	Oklahoma	Texas
Establishments, total.....number..	187	33	52	49	53	423	57	87	56	223
With 0 to 19 employees.....do....	151	28	41	38	44	354	50	64	51	189
With 20 to 99 employees.....do....	36	5	11	11	9	67	7	23	5	32
With 100 employees and over.....do....	-	-	-	-	-	2	-	-	-	2
Net shipments of sand and gravel <sup>1</sup> .....1,000 short tons..	25,040	6,556	6,609	5,248	6,627	52,581	6,092	14,360	5,046	27,083
Value of shipments and receipts, total.....\$1,000..	32,297	7,538	10,609	7,005	7,145	66,870	6,393	18,033	6,247	36,197
Sand and gravel transferred to other establishments for preparation and resales.....do....	721	574	52	38	57	965	99	110	49	707
Net shipments and receipts.....do....	31,576	6,964	10,557	6,967	7,088	65,905	6,294	17,923	6,198	35,490
Value added in mining.....do....	23,160	5,424	7,580	5,285	4,871	47,677	4,547	12,214	5,038	25,878
Persons in industry, total.....number..	2,403	410	684	630	676	4,718	494	1,245	415	2,560
Production, development, and exploration workers, average for the year.....do....	1,923	299	581	512	531	3,782	422	986	334	2,040
Other employees.....do....	382	88	74	100	117	712	40	219	51	398
Proprietors and firm members.....do....	98	23	29	18	28	224	32	40	30	122
Performing manual labor.....do....	76	18	20	16	22	184	31	30	29	14
Man-hours worked by production, development, and exploration workers, total.....1,000..	4,388	762	1,278	1,104	1,244	8,587	953	2,246	845	4,543
At mining operations, total.....do....	2,406	172	811	719	704	6,321	671	1,810	665	3,173
Underground.....do....	40	-	-	-	40	-	-	-	-	-
Open-pit or bank.....do....	1,994	156	599	649	590	5,549	618	1,589	583	2,950
Surface.....do....	372	16	212	70	74	772	55	221	82	414
At preparation plants.....do....	1,982	590	467	385	540	2,266	280	436	180	1,370
Man-hours spent on development and exploration work (included above).....do....	99	67	11	6	15	260	126	58	21	61
Principal expenses designated below, total.....\$1,000..	20,086	4,348	6,728	4,249	4,763	40,076	4,204	11,011	3,092	21,769
Wages of production, development, and exploration workers.....do....	8,059	1,559	2,605	1,856	2,039	15,614	1,741	3,841	1,379	8,653
Salaries of all other employees.....do....	1,792	456	560	370	408	3,135	225	704	234	1,972
Supplies.....do....	6,077	1,571	2,240	1,163	1,524	13,812	1,415	4,275	665	7,457
Sand and gravel received for preparation.....do....	421	-	-	-	29	328	2	100	41	135
Purchases for resale.....do....	202	114	59	-	29	328	2	100	41	135
Purchased fuel.....do....	1,837	314	521	459	543	3,266	305	1,002	370	1,589
Purchased electric energy.....do....	621	95	229	164	133	1,814	143	633	234	804
Contract work.....do....	1,077	239	514	237	87	2,107	373	456	169	1,109
Purchased machinery installed.....do....	2,315	628	408	573	706	5,597	763	1,415	497	2,922
Capital expenditures, total.....do....	3,413	847	942	876	748	7,731	1,155	2,062	767	3,747
Development and exploration of mineral property.....do....	71	3	24	21	23	112	22	30	8	52
Preparation plant and other construction.....do....	564	72	250	160	82	1,177	291	310	78	498
New machinery and equipment.....do....	2,169	599	534	553	483	5,147	656	1,495	560	2,436
Used plant and equipment.....do....	609	173	134	142	160	1,295	186	227	121	761
Energy used.....million kwh. equivalent..	659	120	270	129	140	1,430	521	312	113	484
Coal.....1,000 short tons..	5	(2)	4	(2)	1	57	57	-	(2)	(2)
Fuel oil <sup>2</sup> .....1,000 barrels..	143	32	56	28	27	105	15	23	9	58
Gas.....million cu. ft..	210	29	181	2	(2)	596	(2)	247	92	177
Gasoline.....1,000 gallons..	1,887	496	419	358	614	2,591	156	769	147	1,527
Other fuels.....\$1,000..	193	25	56	75	37	515	63	142	53	257
Undistributed.....do....	661	113	188	165	195	1,176	110	361	133	572
Electric energy purchased.....million kwh..	35	5	13	9	8	125	10	46	20	49
Electric energy generated and used.....do....	3	1	2	-	-	2	1	-	-	1
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	244	31	65	63	85	537	44	123	45	325
Per production worker.....hp..	127	104	112	123	160	142	104	125	135	159
Prime movers.....1,000 hp..	204	26	55	51	72	438	38	95	33	272
Electric motors driven by purchased energy.....do....	40	5	10	12	13	99	6	28	12	53
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	-	-	-	-	-	4	4	-	1	-

See footnotes at end of table.

TABLE 3A. Detailed Statistics, by Geographic Areas: 1963—Continued

Item	Mountain				Pacific			
	Division	Colorado	Arizona	Utah	Division	Washington	Oregon	California
Establishments, total.....number..	342	89	37	39	568	91	86	374
With 0 to 19 employees.....do....	317	84	30	35	470	84	75	294
With 20 to 99 employees.....do....	24	5	6	4	94	7	9	78
With 100 employees and over.....do....	1	-	1	-	4	-	2	2
Net shipments of sand and gravel <sup>1</sup> .....1,000 short tons..	34,060	10,084	6,977	5,236	110,024	10,035	9,683	89,475
Value of shipments and receipts, total.....\$1,000..	38,219	11,365	7,900	5,070	136,993	10,933	13,486	110,774
Sand and gravel transferred to other establishments for preparation and resales.....do....	156	60	14	42	2,414	375	463	1,535
Net shipments and receipts.....do....	38,063	11,305	7,886	5,028	134,579	10,558	13,023	109,239
Value added in mining.....do....	28,213	8,115	6,189	3,758	105,449	7,661	10,201	86,110
Persons in industry, total.....number..	2,611	646	610	350	6,736	549	1,169	4,943
Production, development, and exploration workers, average for the year.....do....	2,167	535	505	303	5,283	417	839	3,962
Other employees.....do....	261	66	89	30	1,169	77	282	804
Proprietors and firm members.....do....	183	45	16	17	284	55	48	177
Performing manual labor.....do....	154	37	15	17	240	51	38	148
Man-hours worked by production, development, and exploration workers, total.....1,000..	4,240	1,040	989	547	10,952	845	1,637	8,340
At mining operations, total.....do....	2,517	755	397	341	6,061	663	1,120	4,178
Underground.....do....	-	-	-	-	-	-	-	-
Open-pit or bank.....do....	2,215	669	347	272	5,010	491	1,010	3,422
Surface.....do....	302	81	50	69	1,051	172	110	766
At preparation plants.....do....	1,723	285	592	206	4,891	182	517	4,162
Man-hours spent on development and exploration work (included above).....do....	11	-	10	-	159	11	10	138
Principal expenses designated below, total.....\$1,000..	22,699	6,752	4,706	2,910	76,513	6,848	10,278	58,699
Wages of production, development, and exploration workers.....do....	10,491	2,847	2,250	1,353	33,617	2,917	4,747	25,595
Salaries of all other employees.....do....	1,516	455	537	160	7,957	310	1,887	5,733
Supplies.....do....	6,718	2,064	1,229	935	23,124	2,186	2,231	18,651
Sand and gravel received for preparation.....do....	45	34	-	-	1,104	28	184	650
Purchases for resale.....do....	1,743	373	260	275	3,524	327	798	2,599
Purchased fuel.....do....	695	214	263	71	3,147	214	154	2,764
Purchased electric energy.....do....	1,491	765	167	116	3,871	866	277	2,572
Contract work.....do....	3,571	767	632	393	11,914	1,492	1,691	8,562
Purchased machinery installed.....do....	4,257	967	840	478	15,309	1,841	2,050	11,269
Capital expenditures, total.....do....	44	10	6	3	222	26	32	160
Development and exploration of mineral property.....do....	699	281	105	68	1,983	180	375	1,386
Preparation plant and other construction.....do....	2,733	617	686	291	11,035	1,512	1,291	8,126
New machinery and equipment.....do....	781	59	43	116	2,069	123	352	1,597
Used plant and equipment.....do....	399	103	79	46	1,138	113	155	862
Energy used.....million kwh. equivalent..	(Z)	(Z)	-	-	-	-	-	-
Coal.....1,000 short tons..	48	17	2	5	132	20	19	93
Fuel oil <sup>2</sup> .....1,000 barrels..	48	(Z)	4	-	245	-	-	245
Gas.....million cu. ft..	657	225	114	62	3,036	452	373	2,136
Gasoline.....1,000 gallons..	354	89	134	27	897	72	123	700
Other fuels.....\$1,000..	627	134	94	99	1,178	118	287	750
Undistributed.....do....	40	11	15	4	224	17	9	198
Electric energy purchased.....million kwh..	2	1	-	-	1	1	-	-
Electric energy generated and used.....do....	300	68	80	36	821	74	101	633
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	138	127	158	119	155	177	120	160
Per production worker.....hp..	255	54	68	31	633	53	83	485
Prime movers.....1,000 hp..	45	14	12	5	188	21	18	148
Electric motors driven by purchased energy.....do....	1	-	-	-	2	1	-	1
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	1	-	-	-	2	1	-	1

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
(Z) Less than one-half of the unit of measure specified.

<sup>1</sup>Represents gross shipments less sand and gravel received for preparation.

<sup>2</sup>Separate data were reported for distillate and residual fuel oil. For the United States total for the Sand and Gravel Industry, 1,193 thousand barrels of distillate fuel oil were reported used, and 286 thousand barrels of residual fuel oil.

TABLE 3B. Detailed Statistics for Selected Types of Operation: 1963

Item	144— sand and gravel industry	Construction sand and gravel subindustry											
		All establish- ments, total	Producing establishments										
			Total	Bank				Bank and wet pit	Bank and dry pit	Wet pit			
				Mining only	Mining with preparation					Mining only	Mining with preparation		
					Screening only	Crushing only	Washing and other methods				Screening only	Crushing only	Washing and other methods
Establishments, total.....number..	4,616	4,419	4,372	308	96	45	314	213	244	64	101	78	727
With 0 to 19 employees.....do....	4,104	3,957	3,911	301	90	39	282	177	200	63	91	72	642
With 20 to 99 employees.....do....	492	446	445	7	6	6	31	36	42	1	10	6	81
With 100 employees and over.....do....	20	16	16	-	-	-	1	-	2	-	-	-	4
Including mines.....do....	4,584	4,394	4,347	308	96	45	314	213	244	64	101	78	727
Including preparation plants.....do....	3,840	3,658	3,650	-	96	45	314	209	230	-	101	78	727
Net shipments of primary products <sup>1</sup> .....1,000 short tons..	557,513	534,887	534,887	17,481	6,473	3,981	30,092	39,355	55,725	4,164	9,293	6,131	102,568
Value of shipments and receipts, total..\$1,000..	678,068	607,539	607,516	12,855	7,627	5,462	52,548	37,982	57,653	4,458	12,018	6,672	114,563
Sand and gravel transferred to other establishments for preparation and resales.....do....	11,502	10,454	10,454	138	-	5,462	{ 439	1,511	1,504	4,458	-	-	1,343
Net shipments and receipts.....do....	666,566	597,085	597,062	12,717	7,627		{ 52,145	36,471	56,149		12,018	{ 6,672	113,220
Value added in mining.....do....	513,728	459,288	459,693	9,966	4,925	4,097	41,320	28,006	45,588	3,662	9,088	5,343	87,863
Persons in industry, total.....number..	42,667	38,837	238,590	1,060	622	366	3,122	2,409	3,019	301	895	603	6,802
Production, development, and explora- tion workers, average for year.....do....	33,042	30,024	29,824	722	470	302	2,422	1,978	2,570	245	743	512	5,461
March.....do....	29,400	26,482	26,373	646	427	240	2,075	1,627	2,228	243	671	455	4,856
May.....do....	33,385	30,363	30,224	697	454	311	2,547	2,080	2,674	246	751	486	5,593
August.....do....	34,998	31,946	31,689	729	488	358	2,582	2,178	2,825	244	795	569	5,794
November.....do....	34,067	30,998	30,714	817	463	298	2,470	2,022	2,532	244	755	537	5,567
Other employees.....do....	7,034	6,370	26,349	123	94	55	551	386	313	7	129	79	876
Proprietors and firm members.....do....	2,525	2,443	2,417	215	58	9	149	45	136	49	23	12	465
Performing manual labor.....do....	2,232	2,168	2,146	196	52	8	127	35	86	31	92	6	390
Man-hours worked by production, devel- opment, and exploration workers, total.....1,000..	70,620	64,014	63,647	1,433	1,016	598	5,074	4,592	5,162	500	1,547	1,014	12,020
At mining operations, total.....do....	43,735	40,725	40,383	1,433	739	458	3,299	2,511	3,255	485	1,015	720	8,114
Underground.....do....	209	164	164	1	-	-	2	1	31	6	3	-	49
Open-pit or bank.....do....	36,433	34,129	33,925	1,405	737	456	2,792	2,186	2,664	441	984	715	6,818
Surface.....do....	7,093	6,432	6,294	29	2	2	505	324	560	38	28	5	1,247
At preparation plants.....do....	26,885	23,289	23,264	-	277	140	1,775	2,081	1,907	15	532	294	3,906
Man-hours spent on development and explo- ration work (included above).....do....	1,050	982	964	-	-	10	27	50	47	-	54	-	298
Principal expenses designated below, total.....\$1,000..	394,271	355,334	2353,872	7,045	5,246	3,264	30,613	23,601	27,659	3,010	7,037	4,240	61,374
Wages or production, development, and exploration workers.....do....	170,333	154,546	153,729	2,927	1,822	1,156	14,102	9,665	14,411	1,131	3,044	2,202	28,151
Salaries of all other employees.....do....	41,827	36,378	236,271	393	394	240	3,782	2,466	753	54	449	291	4,289
Supplies.....do....	103,787	94,292	93,896				{ 7,693	6,655	6,421				{ 16,175
Sand and gravel received for prepara- tion.....do....	3,821	3,081	3,081				{ 112	504	499				{ 440
Purchases for resale.....do....	5,832	5,478	5,478	58	-	1	270	423	790	-	54	-	631
Purchased fuel.....do....	29,269	25,773	25,730	753	384	258	2,186	1,679	1,858	357	554	395	5,158
Purchased electric energy.....do....	17,046	14,522	14,482	154	232	117	1,212	1,073	1,241	17	406	138	3,741
Contract work.....do....	22,356	21,264	21,205	872	185	600	1,256	1,136	1,686	244	154	67	2,789
Purchased machinery installed.....do....	57,953	52,795	52,543	1,075	761	180	6,118	2,736	4,956	273	599	368	8,938
Capital expenditures, total.....do....	75,724	68,954	68,592	1,913	1,089	685	7,583	4,232	5,386	1,302	1,213	786	11,172
Development and exploration of mineral property.....do....	1,191	1,147	1,112	13	32	7	157	68	90	23	30	23	182
Preparation plant and other construction.....do....	14,237	13,066	12,978	-	344	101	1,928	1,003	1,178	131	282	189	1,976
New machinery and equipment.....do....	49,859	44,584	44,373	1,592	533	326	4,744	2,742	3,570	625	726	426	8,053
Used plant and equipment.....do....	10,446	10,157	10,129	308	180	251	754	419	548	523	175	148	961
Energy used.....million kwh. equivalent..	10,176	7,962	7,868	172	97	66	863	479	654	92	145	101	1,486
Coal.....1,000 short tons..	157	74	74	(2)	(2)	(2)	21	1	2	(2)	(2)	(2)	10
Fuel oil <sup>2</sup> .....1,000 barrels..	1,479	1,206	1,201	2	(2)	7	249	70	128	4	2	17	87
Gas.....million cu. ft..	2,958	496	495	(2)	(2)	(2)	22	4	22	(2)	(2)	(2)	126
Gasoline.....1,000 gallons..	25,743	24,337	22,217	480	237	246	1,861	1,584	1,941	346	169	294	968
Other fuels.....\$1,000..	4,039	3,902	3,900	(2)	42	(2)	103	81	110	278	153	65	1,249
Undistributed.....do....	10,498	10,127	10,105	587	242	156	450	839	986	10	297	149	2,689
Electric energy purchased.....million kwh..	1,067	889	887	10	19	7	68	69	77	1	27	8	232
Electric energy generated and used.....do....	38	17	17	-	-	-	1	-	1	-	-	-	2
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	4,851	4,603	4,572	108	63	54	385	364	374	37	116	94	794
Per production worker.....hp..	147	153	153	150	134	179	159	184	146	151	156	184	145
Prime movers.....1,000 hp..	3,816	3,658	3,631	89	49	46	306	302	292	33	94	70	586
Electric motors driven by purchased energy.....do....	1,035	945	941	19	14	8	79	62	82	4	22	24	208
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	38	29	29	-	-	-	1	1	1	-	-	2	4

See footnotes at end of table.



TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1963—Continued

Item	Construction sand and gravel subindustry—Continued											
	Producing establishments—Continued										Non-producing establishments	
	Dry pit				River, lake, or ocean				Preparation plant only	All other producing establishments		
	Mining only	Mining with preparation			Mining only	Mining with preparation						
Screening only		Crushing only	Washing and other methods	Screening only		Crushing only	Washing and other methods					
Establishments, total.....number..	307	327	162	933	25	39	19	249	25	96	47	
With 0 to 19 employees.....do....	299	318	151	817	25	33	16	204	19	72	46	
With 20 to 99 employees.....do....	8	9	11	112	-	6	3	41	6	23	1	
With 100 employees and over.....do....	-	-	-	4	-	-	-	4	-	1	-	
Including mines.....do....	307	327	162	933	25	39	19	249	-	96	47	
Including preparation plants.....do....	-	327	162	933	-	39	19	249	25	96	8	
Net shipments of primary products <sup>1</sup> .....1,000 short tons..	11,119	15,240	15,474	139,014	1,788	5,525	1,825	41,015	6,279	22,345	-	
Value of shipments and receipts, total...\$1,000..	10,282	16,129	17,511	157,432	1,652	6,681	1,653	53,491	5,856	24,955	23	
Sand and gravel transferred to other establishments for preparation and resales.....do....	66	-	-	2,788	47	66	-	1,392	187	672	-	
Net shipments and receipts.....do....	10,216	16,129	17,511	154,644	1,605	6,615	1,653	52,099	5,669	24,283	23	
Value added in mining.....do....	8,169	11,937	12,203	117,905	1,112	5,362	1,289	40,377	4,020	17,459	405	
Persons in industry, total.....number..	1,115	1,359	1,122	8,677	105	405	183	3,531	396	1,603	247	
Production, development, and exploration workers, average for year..do....	774	971	919	6,819	81	352	154	2,714	321	1,294	200	
March.....do....	602	911	793	6,149	70	282	138	2,570	309	1,081	109	
May.....do....	694	965	941	6,848	70	368	154	2,737	320	1,288	139	
August.....do....	730	1,011	1,034	7,370	79	392	168	2,803	361	1,479	257	
November.....do....	1,033	999	958	7,046	104	366	158	2,731	283	1,331	284	
Other employees.....do....	126	173	173	1,274	6	40	27	692	41	269	21	
Proprietors and firm members.....do....	215	215	30	564	18	13	2	125	34	40	26	
Performing manual labor.....do....	187	213	24	513	16	9	1	104	31	25	22	
Man-hours worked by production, development, and exploration workers, total...1,000..	1,518	2,006	1,907	14,674	184	756	315	5,867	623	2,841	367	
At mining operations, total.....do....	1,309	1,204	1,225	8,760	154	395	208	3,078	-	2,021	342	
Underground.....do....	2	-	-	5	-	20	-	-	-	44	-	
Open-pit or bank.....do....	1,305	1,187	1,218	6,674	56	293	195	2,460	-	1,342	204	
Surface.....do....	4	17	7	2,081	98	82	13	617	-	635	138	
At preparation plants.....do....	209	802	682	5,914	30	361	107	2,789	623	820	25	
Man-hours spent on development and exploration work (included above).....do....	-	1	20	153	2	23	-	216	14	49	18	
Principal expenses designated below, total.....\$1,000..	6,043	9,595	10,657	87,623	1,089	3,560	1,039	33,664	4,240	15,822	1,462	
Wages of production, development, and exploration workers.....do....	2,597	4,079	3,946	37,378	465	1,928	533	15,291	1,674	7,227	817	
Salaries of all other employees.....do....	363	621	467	7,903	42	159	69	4,305	270	1,510	107	
Supplies.....do....	1,509	2,816	3,563	24,995	318	955	269	8,082	1,135	3,850	396	
Sand and gravel received for preparation.....do....												596
Purchases for resale.....do....												1,714
Purchased fuel.....do....												5,807
Purchased electric energy.....do....	758	537	1,058	5,807	69	272	96	2,405	235	917	43	
Contract work.....do....	240	379	515	3,111	15	139	49	793	197	707	40	
Purchased machinery installed.....do....	570	1,163	1,015	6,119	179	66	23	1,557	645	879	59	
Capital expenditures, total.....do....	1,084	1,012	1,071	13,139	496	491	105	4,523	392	4,226	252	
Development and exploration of mineral property.....do....	2,091	1,715	2,007	15,958	538	647	179	5,427	852	3,817	362	
Preparation plant and other construction.....do....	90	34	55	120	4	18	5	81	32	48	35	
New machinery and equipment.....do....	369	717	432	2,481	164	128	56	956	157	386	88	
Used plant and equipment.....do....	1,310	724	1,169	10,522	312	455	88	3,409	652	2,395	211	
Energy used.....million kwh. equivalent..	322	240	351	2,835	58	46	30	981	11	988	28	
Coal.....1,000 short tons..	191	147	290	1,573	27	115	22	903	153	292	94	
Fuel oil <sup>3</sup> .....1,000 barrels..	(2)	(2)	(2)	19	2	(2)	(2)	19	(2)	(2)	(2)	
Gas.....million cu. ft..	1	2	8	223	(2)	27	(2)	248	42	84	5	
Gasoline.....1,000 gallons..	(2)	(2)	(2)	185	(2)	12	(2)	37	51	36	1	
Other fuels.....\$1,000..	310	239	689	8,696	123	352	171	2,041	647	823	2,120	
Undistributed.....do....	68	58	536	729	11	24	10	268	55	59	2	
Electric energy purchased.....million kwh..	603	400	357	1,304	18	140	45	600	13	222	22	
Electric energy generated and used.....do....	14	24	34	179	1	12	3	38	25	40	-	
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total...1,000 hp..	-	-	-	4	-	-	-	8	-	1	-	
Per production worker.....hp..	126	166	156	1,055	10	45	27	299	69	230	31	
Prime movers.....1,000 hp..	163	171	170	155	123	128	175	110	215	178	155	
Electric motors driven by purchased energy.....do....	102	133	132	859	9	37	22	236	47	187	26	
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	24	33	24	196	1	8	5	63	22	43	-	
Driven by energy generated at the establishment.....do....	-	1	3	6	-	-	-	6	-	4	-	

See footnotes at end of table.

TABLE 3B. Detailed Statistics, by Selected Types of Operation: 1963—Continued

Item	Glass sand subindustry			Molding sand subindustry				Industrial sand, n.e.c., subindustry			
	All establishments, total	Dry pit	All other types	All establishments, total	Bank	Dry pit	All other types	All establishments, total	Bank	Dry pit	All other types
Establishments, total.....number..	39	23	16	93	28	49	16	65	11	29	25
With 0 to 19 employees.....do....	16	7	9	82	26	44	12	49	10	22	17
With 20 to 99 employees.....do....	21	14	7	11	2	5	4	14	1	6	7
With 100 employees and over.....do....	2	2	-	-	-	-	-	2	-	1	1
Including mines.....do....	38	23	15	91	28	49	14	61	11	29	21
Including preparation plants.....do....	39	23	16	85	21	46	19	58	8	24	26
Net shipments of primary products <sup>1</sup> .....1,000 short tons..	5,510	3,904	1,606	5,396	700	3,806	890	3,724	315	1,992	1,417
Value of shipments and receipts, total..\$1,000..	29,099	21,567	7,532	16,642	2,272	10,032	4,338	24,788	1,063	13,674	10,051
Sand and gravel transferred to other establishments for preparation and resales.....do....	346	21,567	7,532	327 16,315	2,272	10,032	4,338	375 24,413	1,063	13,674	10,051
Net shipments and receipts.....do....	28,753										
Value added in mining.....do....	22,649	17,168	5,480	12,838	1,810	7,791	3,237	18,953	757	10,796	7,400
Persons in industry, total.....number..	1,576	1,101	475	982	179	470	333	1,272	71	686	515
Production, development, and exploration workers, average for year.....do....	1,223	906	317	764	152	373	239	1,031	56	553	422
March.....do....	1,208	893	315	731	144	350	237	979	59	517	403
May.....do....	1,232	912	320	781	164	375	242	1,009	57	525	427
August.....do....	1,231	909	322	799	160	398	241	1,022	57	540	425
November.....do....	1,213	904	309	755	142	373	240	1,101	52	619	430
Other employees.....do....	347	192	155	163	19	61	83	220	6	127	87
Proprietors and firm members.....do....	6	3	3	55	8	36	11	21	9	6	6
Performing manual labor.....do....	3	1	2	49	8	30	11	12	5	3	4
Man-hours worked by production, development, and exploration workers, total...1,000..	2,738	1,991	747	1,546	273	837	436	2,322	123	1,097	1,102
At mining operations, total.....do....	1,151	877	274	759	208	400	151	1,100	44	311	745
Underground.....do....	-	-	-	12	-	12	-	33	-	-	33
Open-pit or bank.....do....	968	708	260	687	206	379	102	649	44	279	326
Surface.....do....	183	169	14	60	2	9	49	418	-	32	386
At preparation plants.....do....	1,587	1,114	473	787	65	438	284	1,222	79	791	352
Man-hours spent on development and exploration work (included above).....do....	9	-	9	42	40	2	-	17	-	-	17
Principal expenses designated below, total.....\$1,000..	16,611	11,443	5,168	8,943	1,151	4,760	3,032	13,383	617	7,165	5,603
Wages of production, development, and exploration workers.....do....	6,650	4,869	1,781	3,776	590	2,036	1,150	5,361	266	2,893	2,202
Salaries of all other employees.....do....	2,490	1,415	1,075	1,216	71	438	707	1,743	29	1,113	601
Supplies.....do....	4,004	2,903	1,233	1,765	269	1,229	568	307 3,726	162	1,993	1,878
Sand and gravel received for preparation.....do....	132										
Purchases for resale.....do....	219	209	10	22	-	21	1	113	57	42	14
Purchased fuel.....do....	1,464	1,059	405	904	86	537	281	1,128	37	638	453
Purchased electric energy.....do....	1,330	861	469	465	42	255	168	729	39	307	383
Contract work.....do....	322	127	195	494	93	282	119	276	27	177	72
Purchased machinery installed.....do....	2,977	1,683	1,294	757	85	551	121	1,424	137	665	622
Capital expenditures, total.....do....	3,998	2,443	1,555	904	113	596	195	1,868	153	942	773
Development and exploration of mineral property.....do....	6	-	6	9	3	6	-	29	-	6	23
Preparation plant and other construction.....do....	642	570	72	111	10	58	43	418	6	351	61
New machinery and equipment.....do....	3,144	1,711	1,433	759	96	524	139	1,363	144	557	662
Used plant and equipment.....do....	206	162	44	25	4	8	13	58	3	28	27
Energy used.....million kwh. equivalent..	979	663	316	352	19	182	151	883	13	554	316
Coal.....do....	29	20	9	(Z)	(Z)	(Z)	(Z)	54	(Z)	44	10
Fuel oil <sup>3</sup> .....do....	85	50	35	94	5	49	40	94	(Z)	54	40
Gas.....do....	1,419	1,000	419	343	10	155	178	700	10	276	414
Gasoline.....do....	644	318	326	276	96	108	72	486	26	268	192
Other fuels.....do....	27	27	-	93	3	51	39	17	7	10	(Z)
Undistributed.....do....	164	112	52	112	11	77	24	95	20	36	39
Electric energy purchased.....million kwh..	104	71	33	26	2	15	9	48	2	18	28
Electric energy generated and used.....do....	-	-	-	-	-	-	-	21	-	21	-
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total...1,000 hp..	101	27	74	81	20	46	15	66	4	40	22
Per production worker.....do....	83	30	233	106	132	123	63	64	71	72	52
Prime movers.....do....	51	12	39	59	15	34	10	48	2	28	18
Electric motors driven by purchased energy.....do....	50	15	35	22	5	12	5	18	2	12	4
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	-	-	-	-	-	-	-	9	-	9	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
 (Z) Less than one-half of the unit of measure specified.

<sup>1</sup>Represents the product indicated by the name of the industry or subindustry. Net shipments represents gross shipments less sand and gravel received for preparation.

<sup>2</sup>Includes data for separately reported central offices and related facilities. These were not distributed by detailed types of operation.

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with an average of-									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
INDUSTRY 1441.--SAND AND GRAVEL											
Establishments.....number..	4,616	2,554	872	678	419	73	18	2	-	-	-
All employees:											
Total.....do.....	<sup>1</sup> 40,142	4,127	5,768	9,004	12,205	4,738	<u>3,224</u>	(D)	-	-	-
Payroll.....\$1,000..	<sup>1</sup> 212,160	17,665	28,219	46,336	65,372	26,819	<u>18,967</u>	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	33,042	3,660	4,889	7,582	10,269	4,079	<u>2,563</u>	(D)	-	-	-
Man-hours.....1,000..	70,620	7,597	10,282	16,178	22,114	9,042	<u>5,407</u>	(D)	-	-	-
Wages.....\$1,000..	170,333	16,168	23,908	39,682	53,826	22,559	<u>14,190</u>	(D)	-	-	-
Value added in mining.....do.....	513,728	49,371	69,203	127,603	162,517	61,733	<u>43,301</u>	(D)	-	-	-
Value of shipments and receipts.....do.....	678,068	78,048	90,447	155,300	215,141	85,786	<u>53,346</u>	(D)	-	-	-
Capital expenditures.....do.....	75,724	12,127	10,917	18,509	22,995	7,720	<u>3,456</u>	(D)	-	-	-
Construction Sand and Gravel Subindustry											
Establishments.....number..	4,419	2,478	843	636	383	63	16	-	-	-	-
All employees:											
Total.....do.....	<sup>1</sup> 36,394	3,978	5,582	8,416	11,108	4,069	2,326	-	-	-	-
Payroll.....\$1,000..	<sup>1</sup> 190,924	17,105	27,361	43,333	59,433	22,996	13,201	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	30,024	3,526	4,722	7,100	9,287	3,509	1,880	-	-	-	-
Man-hours.....1,000..	64,014	7,347	9,940	15,127	19,951	7,814	3,835	-	-	-	-
Wages.....\$1,000..	154,546	15,680	23,140	37,348	48,804	19,394	10,180	-	-	-	-
Value added in mining.....do.....	459,288	47,704	66,360	119,693	146,320	50,517	28,694	-	-	-	-
Value of shipments and receipts.....do.....	607,539	75,808	86,695	144,841	193,540	71,030	35,625	-	-	-	-
Capital expenditures.....do.....	68,954	11,909	10,720	17,584	20,550	5,860	2,331	-	-	-	-
Producing establishments, by type of operation, total.....number..	4,372	2,459	823	629	382	63	16	-	-	-	-
Bank:											
Mining only.....do.....	308	255	31	15	7	-	-	-	-	-	-
Mining with preparation:											
Screening only.....do.....	96	64	15	11	5	1	-	-	-	-	-
Crushing only.....do.....	45	28	3	8	6	-	-	-	-	-	-
Washing and other methods.....do.....	314	124	85	75	28	1	1	-	-	-	-
Bank and wet pit.....do.....	213	82	48	47	29	7	-	-	-	-	-
Bank and dry pit.....do.....	244	95	44	60	39	4	2	-	-	-	-
Wet pit:											
Mining only.....do.....	64	49	8	6	1	-	-	-	-	-	-
Mining with preparation:											
Screening only.....do.....	101	59	21	11	5	5	-	-	-	-	-
Crushing only.....do.....	78	44	18	10	4	2	-	-	-	-	-
Washing and other methods.....do.....	727	376	149	117	70	11	4	-	-	-	-
Dry pit:											
Mining only.....do.....	307	257	29	13	8	-	-	-	-	-	-
Mining with preparation:											
Screening only.....do.....	327	249	55	14	8	1	-	-	-	-	-
Crushing only.....do.....	162	93	45	13	7	4	-	-	-	-	-
Washing and other methods.....do.....	933	504	187	125	100	13	4	-	-	-	-
River, lake, or ocean:											
Mining only.....do.....	25	19	3	3	-	-	-	-	-	-	-
Mining with preparation:											
Screening only.....do.....	39	23	4	6	4	2	-	-	-	-	-
Crushing only.....do.....	19	11	-	5	3	-	-	-	-	-	-
Washing and other methods.....do.....	249	102	45	57	35	6	4	-	-	-	-
River, lake, or ocean and bank, wet pit, or dry pit:											
Mining only.....do.....	1	1	-	-	-	-	-	-	-	-	-
Mining with preparation.....do.....	60	15	9	21	12	3	-	-	-	-	-
All other combinations (mining with preparation).....do.....	35	5	11	10	7	1	1	-	-	-	-
Preparation plants only.....do.....	25	4	13	2	4	2	-	-	-	-	-
Glass Sand Subindustry											
Establishments.....number..	39	1	4	11	16	5	1	1	-	-	-
All employees:											
Total.....do.....	<sup>1</sup> 1,570	27	(D)	157	452	839	(D)	(D)	-	-	-
Payroll.....\$1,000..	<sup>1</sup> 9,140	<u>152</u>	(D)	855	2,440	<u>5,010</u>	(D)	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,223	23	(D)	122	405	673	(D)	(D)	-	-	-
Man-hours.....1,000..	2,738	41	(D)	279	900	<u>1,518</u>	(D)	(D)	-	-	-
Wages.....\$1,000..	6,650	<u>140</u>	(D)	604	2,048	<u>3,858</u>	(D)	(D)	-	-	-
Value added in mining.....do.....	22,649	<u>319</u>	(D)	2,548	7,041	<u>12,741</u>	(D)	(D)	-	-	-
Value of shipments and receipts.....do.....	29,099	<u>635</u>	(D)	3,533	9,067	<u>15,864</u>	(D)	(D)	-	-	-
Capital expenditures.....do.....	3,998	31	(D)	230	1,572	<u>2,165</u>	(D)	(D)	-	-	-

See footnotes at end of table.

TABLE 4. Selected Statistics, by Employment Size of Establishment: 1963—Continued

Item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
Glass Sand Subindustry—Continued											
Producing establishments, by type of operation, total.....number..	39	1	4	11	16	5	1	1	-	-	-
Bank (mining with preparation).....do....	8	-	2	2	4	-	-	-	-	-	-
Wet pit (mining with preparation).....do....	2	-	-	-	-	2	-	-	-	-	-
Dry pit (mining with preparation).....do....	23	1	-	6	11	3	1	1	-	-	-
River, lake, or ocean.....do....	2	-	1	1	-	-	-	-	-	-	-
All other combination.....do....	3	-	1	1	1	-	-	-	-	-	-
Preparation plants only.....do....	1	-	-	1	-	-	-	-	-	-	-
Molding Sand Subindustry											
Establishments.....number..	93	52	16	14	9	2	-	-	-	-	-
All employees:											
Total.....do....	1927	97	109	189	466	(D)	-	-	-	-	-
Payroll.....\$1,000..	14,992	362	439	911	2,674	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	764	88	103	153	420	(D)	-	-	-	-	-
Man-hours.....1,000..	1,546	156	200	296	894	(D)	-	-	-	-	-
Wages.....\$1,000..	3,776	302	417	703	2,354	(D)	-	-	-	-	-
Value added in mining.....do....	12,838	1,118	1,808	2,057	7,855	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	16,642	1,498	2,228	2,548	10,368	(D)	-	-	-	-	-
Capital expenditures.....do....	904	125	106	198	475	(D)	-	-	-	-	-
Producing establishments, by type of operation, total.....number..	92	51	16	14	9	2	-	-	-	-	-
Bank:											
Mining only.....do....	7	4	2	1	-	-	-	-	-	-	-
Mining with preparation.....do....	21	15	1	3	2	-	-	-	-	-	-
Bank and pit.....do....	5	1	3	1	-	-	-	-	-	-	-
Wet pit:											
Mining only.....do....	1	-	-	1	-	-	-	-	-	-	-
Mining with preparation.....do....	7	2	1	-	3	1	-	-	-	-	-
Dry pit:											
Mining only.....do....	3	3	-	-	-	-	-	-	-	-	-
Mining with preparation.....do....	46	26	8	7	4	1	-	-	-	-	-
Preparation plants only.....do....	2	-	1	1	-	-	-	-	-	-	-
Industrial Sand, N.E.C. Subindustry											
Establishments.....number..	65	23	9	17	11	3	1	1	-	-	-
All employees:											
Total.....do....	1,251	102	(D)	242	907	(D)	(D)	(D)	-	-	-
Payroll.....\$1,000..	7,104	463	(D)	1,237	5,404	(D)	(D)	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,031	87	(D)	207	737	(D)	(D)	(D)	-	-	-
Man-hours.....1,000..	2,322	195	(D)	476	1,651	(D)	(D)	(D)	-	-	-
Wages.....\$1,000..	5,361	397	(D)	1,027	3,937	(D)	(D)	(D)	-	-	-
Value added in mining.....do....	18,953	1,265	(D)	3,305	14,383	(D)	(D)	(D)	-	-	-
Value of shipments and receipts.....do....	24,788	1,631	(D)	4,378	18,779	(D)	(D)	(D)	-	-	-
Capital expenditures.....do....	1,868	153	(D)	497	1,218	(D)	(D)	(D)	-	-	-
Producing establishments by type of operation, total.....number..	65	23	9	17	11	3	1	1	-	-	-
Bank:											
Mining only.....do....	3	3	-	-	-	-	-	-	-	-	-
Mining with preparation.....do....	8	3	3	1	1	-	-	-	-	-	-
Bank and pit (mining with preparation).....do....	1	-	-	1	-	-	-	-	-	-	-
Wet pit (mining with preparation).....do....	13	4	1	3	2	2	1	-	-	-	-
Dry pit:											
Mining only.....do....	5	3	1	-	1	-	-	-	-	-	-
Mining with preparation.....do....	24	9	2	7	4	1	-	1	-	-	-
River, lake, or ocean and other combinations (mining with preparation).....do....	7	1	1	2	3	-	-	-	-	-	-
Preparation plants only.....do....	4	-	1	3	-	-	-	-	-	-	-

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.

<sup>1</sup>Includes figures for separately reported central offices and related facilities. These were not distributed by employment size.

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1963 and 1958

(In thousands of dollars)

Ind. code	Industry and year	Value of shipments and receipts of establishments classified in the industry					Value of net shipments of primary products		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total (produced in all industries)	Produced in this industry or subindustry	Produced in other industries or subindustries
1441	Sand and gravel industry.....1963..	678,068	650,025	16,745	3,617	7,681	<sup>1</sup> 731,104	646,204	<sup>1</sup> 84,900
	.....1958..	560,806	519,327	29,154	4,595	7,730	<sup>1</sup> 591,188	518,457	<sup>1</sup> 72,731
	Construction sand and gravel subindustry.....1963..	607,539	578,059	18,490	3,617	7,373	<sup>1</sup> 660,953	574,978	<sup>1</sup> 85,975
	.....1958..	<sup>2</sup> 516,090	<sup>2</sup> 474,510	<sup>2</sup> 29,944	<sup>2</sup> 4,595	<sup>2</sup> 7,041	<sup>1</sup> 2550,289	<sup>2</sup> 473,717	<sup>1</sup> 276,572
	Glass sand subindustry.....1963..	29,099	21,180	7,705	-	214	27,078	21,048	6,030
	.....1958..	28,343	19,442	8,568	-	333	<sup>3</sup> 21,955	<sup>3</sup> 19,442	2,513
	Molding sand subindustry.....1963..	16,642	14,052	2,564	122	26	20,687	13,751	6,936
	.....1958..	16,373	14,319	1,698	-	356	<sup>3</sup> 19,021	<sup>3</sup> 14,319	4,702
	Industrial sand, n.e.c., subindustry...1963..	24,788	15,274	9,446	-	68	22,386	14,967	7,419
	.....1958..	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
<sup>1</sup>Represents the value of net shipments plus the approximate value of sand and gravel produced and used in the same establishment in the manufacture of concrete brick and block, ready-mixed concrete, and asphalt and tar paving mixtures.  
<sup>2</sup>Figures for the Industrial Sand, N.E.C., Subindustry are included with those for the Construction Sand and Gravel Subindustry.  
<sup>3</sup>Represents gross shipments.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958

Product and geographic area	1963			1958		
	Total production	Total shipments (including interplant transfers) or receipts		Total production	Total shipments (including interplant transfers) or receipts	
		Quantity (1,000 short tons)	Value (\$1,000)		Quantity (1,000 short tons)	Value (\$1,000)
UNITED STATES						
Total.....	627,628	609,643	700,117	553,959	527,053	569,828
Construction sand, total.....	271,569	263,316	265,168	<sup>1</sup> 233,934	<sup>1</sup> 220,440	<sup>1</sup> 221,103
Run of pit or bank.....	32,869	32,287	26,810	<sup>1</sup> 44,586	<sup>1</sup> 44,507	<sup>1</sup> 36,143
Washed, screened, ground, or otherwise prepared.....	238,700	231,029	238,358	<sup>1</sup> 189,348	<sup>1</sup> 175,933	<sup>1</sup> 184,960
Glass sand.....	8,109	8,097	27,210	7,446	7,421	21,955
Molding sand.....	7,755	7,757	20,988	7,763	7,709	19,021
Industrial sand, n.e.c.....	5,520	5,528	22,693	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Gravel, total.....	334,675	324,945	364,058	304,816	291,483	307,749
Run of pit or bank.....	45,086	44,080	35,246	72,427	72,675	51,950
Washed, screened, or otherwise prepared.....	289,589	280,865	328,812	232,389	218,808	255,799
Sand and gravel received for preparation in the sand and gravel industry.....	(X)	4,177	3,821	(X)	2,172	870
NEW ENGLAND						
Total.....	32,562	30,224	31,875	21,953	19,747	21,269
Construction sand, total.....	16,864	15,585	15,454	<sup>1</sup> 9,635	<sup>1</sup> 8,802	<sup>1</sup> 8,299
Run of pit or bank.....	2,008	1,909	1,354	<sup>1</sup> 1,772	<sup>1</sup> 1,780	<sup>1</sup> 1,191
Washed, screened, ground, or otherwise prepared.....	14,856	13,676	14,100	<sup>1</sup> 7,863	<sup>1</sup> 7,022	<sup>1</sup> 7,108
Glass sand, molding sand, and industrial sand, n.e.c.....	234	233	944	<sup>1</sup> 168	<sup>1</sup> 156	<sup>1</sup> 434
Gravel, total.....	15,464	14,406	15,477	12,150	10,789	12,536
Run of pit or bank.....	3,283	3,121	1,870	3,384	3,375	2,554
Washed, screened, or otherwise prepared.....	12,181	11,285	13,607	8,766	7,414	9,982
Maine.....	1,560	1,458	1,426	1,464	1,311	1,199
New Hampshire.....	2,689	2,429	2,467	1,133	1,080	1,249
Vermont.....	926	856	704	853	795	867
Massachusetts.....	17,749	16,321	16,311	11,308	9,775	10,250
Rhode Island.....	1,941	1,925	2,085	1,378	1,263	1,316
Connecticut.....	7,697	7,235	8,882	5,817	5,523	6,388
MIDDLE ATLANTIC						
Total.....	61,674	59,096	83,900	52,868	50,883	68,687
Construction sand, total.....	32,154	30,750	36,567	<sup>1</sup> 27,848	<sup>1</sup> 26,840	<sup>1</sup> 30,675
Run of pit or bank.....	3,263	3,266	2,910	<sup>1</sup> 3,798	<sup>1</sup> 3,796	<sup>1</sup> 3,523
Washed, screened, ground, or otherwise prepared.....	28,891	27,484	33,657	<sup>1</sup> 24,050	<sup>1</sup> 23,044	<sup>1</sup> 27,152
Glass sand.....	1,593	1,593	6,036	1,577	1,578	4,732
Molding sand.....	1,908	1,917	6,565	2,422	2,389	7,187
Industrial sand, n.e.c.....	1,012	1,011	4,346	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Gravel, total.....	25,007	23,825	30,386	21,021	20,076	26,093
Run of pit or bank.....	3,871	3,814	2,847	4,267	4,301	3,018
Washed, screened, ground, or otherwise prepared.....	21,136	20,011	27,539	16,754	15,775	23,075
New York, total.....	29,348	27,160	31,764	27,822	27,114	31,657
Construction sand, total.....	16,711	15,747	17,853	<sup>1</sup> 15,093	<sup>1</sup> 14,763	<sup>1</sup> 15,884
Run of pit or bank.....	1,560	1,554	1,043	<sup>1</sup> 2,228	<sup>1</sup> 2,228	<sup>1</sup> 1,989
Washed, screened, ground, or otherwise prepared.....	15,151	14,193	16,810	12,865	<sup>1</sup> 12,535	<sup>1</sup> 13,895
Glass sand, molding sand, and industrial sand, n.e.c.....	283	283	887	<sup>1</sup> 449	<sup>1</sup> 414	<sup>1</sup> 905
Gravel, total.....	12,354	11,130	13,024	12,280	11,937	14,868
Run of pit or bank.....	2,999	2,952	1,957	3,151	3,153	2,017
Washed, screened, or otherwise prepared.....	9,355	8,178	11,067	9,129	8,784	12,851
New Jersey, total.....	16,108	16,087	26,572	12,168	11,683	18,127
Construction sand, total.....	7,363	7,164	7,673	<sup>1</sup> 6,921	<sup>1</sup> 6,653	<sup>1</sup> 7,167
Run of pit or bank.....	1,359	1,370	1,408	<sup>1</sup> 1,169	<sup>1</sup> 1,169	<sup>1</sup> 1,054
Washed, screened, ground, or otherwise prepared.....	6,004	5,794	6,265	<sup>1</sup> 5,752	<sup>1</sup> 5,484	<sup>1</sup> 6,113
Glass sand, molding sand, and industrial sand, n.e.c.....	2,798	2,798	10,859	<sup>1</sup> 2,398	<sup>1</sup> 2,398	<sup>1</sup> 7,097
Gravel, total.....	5,947	6,125	8,040	2,849	2,632	3,863
Run of pit or bank.....	583	576	654	(NA)	(NA)	(NA)
Washed, screened, or otherwise prepared.....	5,364	5,549	7,386	(NA)	(NA)	(NA)
Pennsylvania, total.....	16,218	15,849	25,564	12,878	12,086	18,903
Construction sand.....	8,080	7,839	11,041	<sup>1</sup> 5,834	<sup>1</sup> 5,424	<sup>1</sup> 7,624
Washed, screened, ground, or otherwise prepared.....	7,736	7,497	10,582	(NA)	(NA)	(NA)
Glass sand, molding sand, and industrial sand, n.e.c.....	1,432	1,440	5,201	<sup>1</sup> 1,152	<sup>1</sup> 1,155	<sup>1</sup> 3,917
Gravel.....	6,706	6,570	9,322	5,892	5,507	7,362
Washed, screened, or otherwise prepared.....	6,417	6,284	9,086	(NA)	(NA)	(NA)

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	1963			1958		
	Total production	Total shipments (including interplant transfers) or receipts		Total production	Total shipments (including interplant transfers) or receipts	
		Quantity (1,000 short tons)	Value (\$1,000)		Quantity (1,000 short tons)	Value (\$1,000)
EAST NORTH CENTRAL						
Total.....	148,733	147,147	155,389	141,906	138,035	146,387
Construction sand, total.....	59,736	59,225	52,101	157,778	155,937	156,081
Run of pit or bank.....	7,710	7,674	5,301	112,144	112,039	119,966
Washed, screened, ground, or otherwise prepared.....	52,026	51,551	46,800	145,634	143,898	146,115
Glass sand.....	2,466	2,466	7,093	1,798	1,797	5,189
Molding sand.....	4,666	4,666	10,713	3,540	3,541	7,615
Industrial sand, n.e.c.....	1,514	1,528	6,131	(1)	(1)	(1)
Gravel, total.....	80,351	79,262	79,351	78,790	76,760	77,502
Run of pit or bank.....	11,684	11,588	7,840	13,554	13,835	11,598
Washed, screened, or otherwise prepared.....	68,667	67,674	71,511	65,236	62,925	65,904
Ohio, total.....	37,832	37,248	44,138	32,613	31,165	37,874
Construction sand, total.....	15,724	15,542	15,064	113,668	113,119	113,886
Run of pit or bank.....	2,406	2,427	1,334	12,557	12,558	12,315
Washed, screened, ground, or otherwise prepared.....	13,318	13,115	13,730	111,111	110,561	111,571
Glass sand, molding sand, and industrial sand, n.e.c.....	1,078	1,074	4,388	1977	1994	13,668
Gravel, total.....	21,030	20,632	24,686	17,968	17,052	20,320
Run of pit or bank.....	2,812	2,777	1,909	3,082	3,216	2,787
Washed, screened, or otherwise prepared.....	18,218	17,855	22,777	14,886	13,836	17,533
Indiana, total.....	23,090	23,115	20,858	18,509	18,314	16,716
Construction sand.....	10,829	10,857	8,894	(NA)	(NA)	(NA)
Washed, screened, ground, or otherwise prepared.....	10,110	10,146	8,438	(NA)	(NA)	(NA)
Glass sand, molding sand, and industrial sand, n.e.c.....	322	333	478	(NA)	(NA)	(NA)
Gravel, total.....	11,939	11,925	11,486	(NA)	(NA)	(NA)
Run of pit or bank.....	1,628	1,616	998	(NA)	(NA)	(NA)
Washed, screened, or otherwise prepared.....	10,311	10,309	10,488	(NA)	(NA)	(NA)
Illinois, total.....	29,620	29,029	33,440	36,627	36,193	41,050
Construction sand, total.....	12,542	12,253	10,071	116,722	116,409	119,079
Run of pit or bank.....	1,182	1,175	727	12,838	12,815	12,593
Washed, screened, ground, or otherwise prepared.....	11,360	11,078	9,344	113,884	113,594	116,486
Glass sand, molding sand, and industrial sand, n.e.c.....	2,900	2,901	10,205	11,882	11,867	14,758
Gravel, total.....	14,178	13,875	13,164	18,023	17,917	17,213
Run of pit or bank.....	1,477	1,478	1,021	3,256	3,157	2,857
Washed, screened, or otherwise prepared.....	12,701	12,397	12,143	14,767	14,760	14,356
Michigan, total.....	36,422	36,369	36,709	34,565	33,319	33,493
Construction sand, total.....	14,403	14,428	12,268	112,964	112,490	111,103
Run of pit or bank.....	2,220	2,226	1,766	13,800	13,773	12,689
Washed, screened, ground, or otherwise prepared.....	12,183	12,202	10,502	19,164	18,717	18,414
Glass sand, molding sand, and industrial sand, n.e.c.....	3,210	3,216	6,267	11,429	11,428	12,441
Gravel, total.....	18,809	18,725	18,174	20,172	19,401	19,949
Run of pit or bank.....	1,750	1,749	1,512	2,423	2,385	2,328
Washed, screened, or otherwise prepared.....	17,059	16,976	16,662	17,749	17,016	17,621
Wisconsin, total.....	21,769	21,386	20,244	19,592	19,044	17,254
Construction sand, total.....	6,238	6,145	5,804	16,842	16,582	16,055
Run of pit or bank.....	1,183	1,135	1,018	12,005	11,949	11,530
Washed, screened, ground, or otherwise prepared.....	5,055	5,010	4,786	14,837	14,633	14,525
Glass sand, molding sand, and industrial sand, n.e.c.....	1,136	1,136	2,599	1683	1682	11,460
Gravel, total.....	14,395	14,105	11,841	12,067	11,780	9,739
Run of pit or bank.....	4,017	3,968	2,400	3,145	3,145	2,302
Washed, screened, ground, or otherwise prepared.....	10,378	10,137	9,441	8,922	8,635	7,437
WEST NORTH CENTRAL						
Total.....	70,615	69,272	68,514	62,615	59,604	55,384
Construction sand, total.....	27,991	27,311	23,588	124,000	122,749	119,929
Run of pit or bank.....	2,583	2,878	1,780	14,870	14,815	14,056
Washed, screened, ground, or otherwise prepared.....	25,408	24,433	21,808	119,130	117,934	115,873
Glass sand, molding sand, and industrial sand, n.e.c.....	1,556	1,555	4,811	1612	1613	11,415
Gravel, total.....	41,068	40,406	40,115	38,003	36,242	34,040
Run of pit or bank.....	4,755	4,758	3,372	8,969	8,736	7,807
Washed, screened, or otherwise prepared.....	36,313	35,648	36,743	29,034	27,506	26,233

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	1963			1958		
	Total production	Total shipments (including interplant transfers) or receipts		Total production	Total shipments (including interplant transfers) or receipts	
		Quantity (1,000 short tons)	Value (\$1,000)		Quantity (1,000 short tons)	Value (\$1,000)
WEST NORTH CENTRAL—Continued						
Minnesota.....	19,280	18,570	16,306	17,486	16,270	16,406
Iowa.....	11,332	11,016	11,723	10,608	10,109	10,317
Missouri.....	10,471	10,306	13,013	7,853	7,865	8,493
North Dakota.....	3,865	3,853	3,697	7,247	6,880	5,140
South Dakota.....	3,444	3,441	3,792			
Nebraska.....	11,712	11,692	10,988			
Kansas.....	10,511	10,394	8,995	9,226	8,410	6,936
SOUTH ATLANTIC						
Total.....	57,958	56,469	70,354	52,171	49,313	55,837
Construction sand, total.....	31,938	31,141	32,267	<sup>1</sup> 30,734	<sup>1</sup> 29,318	<sup>1</sup> 25,847
Run of pit or bank.....	6,110	6,027	5,520	<sup>1</sup> 9,285	<sup>1</sup> 9,286	<sup>1</sup> 6,711
Washed, screened, ground, or otherwise prepared.....	25,828	25,114	26,747	<sup>1</sup> 21,449	<sup>1</sup> 20,032	<sup>1</sup> 19,136
Glass sand, molding sand, and industrial sand, n.e.c.....	2,259	2,257	8,978	<sup>1</sup> 1,653	<sup>1</sup> 1,653	<sup>1</sup> 5,566
Gravel, total.....	23,761	23,071	29,109	19,784	18,342	24,424
Run of pit or bank.....	4,405	4,086	3,404	3,637	3,636	3,140
Washed, screened, or otherwise prepared.....	19,356	18,985	25,705	16,147	14,706	21,284
Delaware.....	1,247	1,234	1,774	891	834	759
Maryland and District of Columbia <sup>2</sup> .....	14,543	13,745	17,886	8,978	7,642	10,217
Virginia.....	10,326	10,214	12,890	8,511	8,415	10,673
West Virginia.....	5,491	5,376	10,907	5,276	5,168	8,647
North Carolina.....	8,285	8,140	8,909	5,496	5,402	5,548
South Carolina.....	3,411	3,358	4,732	4,072	3,959	4,085
Georgia.....	4,696	4,535	4,561	5,058	5,106	5,153
Florida.....	9,959	9,867	8,695	13,889	12,787	10,755
EAST SOUTH CENTRAL						
Total.....	27,289	26,923	32,161	22,088	21,644	23,029
Construction sand, total.....	12,960	12,802	13,989	<sup>1</sup> 10,833	<sup>1</sup> 10,518	<sup>1</sup> 10,214
Run of pit or bank.....	1,725	1,692	1,607	<sup>1</sup> 2,234	<sup>1</sup> 2,209	<sup>1</sup> 2,003
Washed, screened, ground, or otherwise prepared.....	11,235	11,110	12,382	<sup>1</sup> 8,599	<sup>1</sup> 8,309	<sup>1</sup> 8,211
Glass sand, molding sand, and industrial sand, n.e.c.....	887	881	2,326	<sup>1</sup> 977	<sup>1</sup> 975	<sup>1</sup> 1,646
Gravel, total.....	13,442	13,240	15,846	10,278	10,151	11,169
Run of pit or bank.....	2,449	2,503	1,862	1,447	1,384	1,121
Washed, screened, or otherwise prepared.....	10,993	10,737	13,984	8,831	8,767	10,048
Kentucky.....	7,140	7,143	7,500	4,402	4,354	4,230
Tennessee.....	7,685	7,467	10,638	6,738	6,454	7,586
Alabama.....	5,878	5,602	7,347	3,865	3,795	4,143
Mississippi.....	6,586	6,711	6,676	7,083	7,041	7,070
WEST SOUTH CENTRAL						
Total.....	57,005	56,642	70,218	53,442	51,581	60,343
Construction sand, total.....	27,442	27,014	27,682	<sup>1</sup> 22,742	<sup>1</sup> 21,813	<sup>1</sup> 21,050
Run of pit or bank.....	3,357	3,288	2,488	<sup>1</sup> 3,744	<sup>1</sup> 3,746	<sup>1</sup> 3,176
Washed, screened, ground, or otherwise prepared.....	24,085	23,726	25,194	<sup>1</sup> 18,998	<sup>1</sup> 18,067	<sup>1</sup> 17,874
Glass sand, molding sand, and industrial sand, n.e.c.....	1,623	1,622	5,773	<sup>1</sup> 838	<sup>1</sup> 835	<sup>1</sup> 2,480
Gravel, total.....	27,940	28,006	36,763	29,862	28,933	36,813
Run of pit or bank.....	3,178	3,536	3,472	4,664	4,639	4,165
Washed, screened, or otherwise prepared.....	24,762	24,470	33,291	25,198	24,294	32,648
Arkansas.....	6,707	6,531	7,990	6,388	6,039	6,439
Louisiana.....	14,428	14,880	17,998	13,463	13,431	16,465
Oklahoma.....	5,111	4,868	6,704	4,426	4,307	4,807
Texas, total.....	30,759	30,363	37,526	29,165	27,804	32,632
Construction sand, total.....	14,478	14,132	14,645	(NA)	(NA)	(NA)
Run of pit or bank.....	1,989	1,966	1,563	(NA)	(NA)	(NA)
Washed, screened, ground, or otherwise prepared.....	12,489	12,166	13,082	(NA)	(NA)	(NA)
Glass sand, molding sand, and industrial sand, n.e.c.....	474	473	1,864	(NA)	(NA)	(NA)
Gravel, total.....	15,807	15,758	21,017	(NA)	(NA)	(NA)
Run of pit or bank.....	1,550	1,910	2,139	(NA)	(NA)	(NA)
Washed, screened, or otherwise prepared.....	14,257	13,848	18,878	(NA)	(NA)	(NA)



TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	1963			1958		
	Total production	Total shipments (including interplant transfers) or receipts		Total production	Total shipments (including interplant transfers) or receipts	
		Quantity (1,000 short tons)	Value (\$1,000)		Quantity (1,000 short tons)	Value (\$1,000)
MOUNTAIN—Continued						
Gravel, total.....	31,108	29,471	31,613	47,035	44,363	30,893
Run of pit or bank.....	2,842	2,718	2,369	28,236	28,391	14,546
Washed, screened, or otherwise prepared.....	28,266	26,753	29,244	18,799	15,972	16,347
Montana.....	2,704	2,651	2,759	3,129	2,826	3,595
Idaho.....	1,721	1,604	2,060	3,827	3,441	3,600
Wyoming.....	2,222	2,087	2,085	1,715	1,588	1,265
Colorado.....	11,977	11,395	12,148	9,335	8,263	7,763
New Mexico.....	5,122	5,142	5,734	7,237	6,582	5,926
Arizona.....	10,598	9,539	11,580	6,028	3,972	4,233
Utah.....	5,915	5,820	5,491	26,603	26,189	13,327
Nevada.....	3,565	3,083	4,379	1,666	1,718	2,195
PACIFIC						
Total.....	127,968	122,549	141,470	87,376	81,667	96,988
Construction sand, total.....	50,073	47,940	50,161	138,288	134,666	138,788
Run of pit or bank.....	5,280	4,782	5,029	13,833	13,802	12,943
Washed, screened, ground, or otherwise prepared.....	44,793	43,158	45,132	134,455	130,864	135,845
Glass sand, molding sand, and industrial sand, n.e.c.....	1,361	1,351	5,911	1,195	1,174	13,921
Gravel, total.....	76,534	73,258	85,398	47,893	45,827	54,279
Run of pit or bank.....	8,619	7,956	8,210	4,269	4,378	4,001
Washed, screened, or otherwise prepared.....	67,915	65,302	77,188	43,624	41,449	50,278
Washington.....	12,942	11,498	12,239	12,220	10,314	9,682
Oregon.....	11,723	11,170	13,950	6,565	6,169	8,273
California, total.....	101,923	98,462	112,845	67,365	64,151	77,176
Construction sand, total.....	42,433	40,888	42,320	129,802	127,977	131,281
Run of pit or bank.....	4,260	3,824	3,879	13,182	13,149	12,094
Washed, screened, ground, or otherwise prepared.....	38,173	37,064	38,441	126,620	124,828	129,187
Glass sand, molding sand, and industrial sand, n.e.c.....	1,151	1,141	5,351	1,167	1,147	13,772
Gravel, total.....	58,339	56,433	65,174	36,396	35,027	42,123
Run of pit or bank.....	5,823	5,555	5,734	2,990	3,051	2,763
Washed, screened, or otherwise prepared.....	52,516	50,878	59,440	33,406	31,976	39,360
Alaska and Hawaii.....	1,380	1,419	2,436	1,226	1,033	1,857

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.

<sup>1</sup>Industrial sand, n.e.c., is included with common sand.

<sup>2</sup>No sand or gravel production was reported in the District of Columbia in 1963.

TABLE 6B. Product Classes—Indexes of Production and Unit Value for Primary Products Shipped by All Producers: 1963 and 1958

Product and year	Indexes (1954 = 100)	
	Production	Unit value
All sand and gravel (net shipments).....1963..	143	112
.....1958..	123	109
Construction sand and gravel (net shipments).....1963..	146	112
.....1958..	125	109
Construction sand.....1963..	158	113
.....1958..	131	108
Construction gravel.....1963..	138	111
.....1958..	121	110
Glass sand (net shipments).....1963..	134	122
.....1958..	125	106

TABLE 6C. Shipments of Primary Products Distributed by Value  
Per Ton: 1963

Product and average value per ton f.o.b. mine or plant <sup>1</sup>	Quantity shipped		Value of shipments	
	Short tons (1,000)	Percent of total quantity	Value (\$1,000)	Percent of total value
<b>Construction Sand:</b>				
Run of pit or bank, total.....	32,287	100.0	26,810	100.0
Less than \$0.23.....	837	2.6	141	0.5
\$0.23 - \$0.29.....	574	1.8	145	0.5
\$0.30 - \$0.38.....	1,102	3.4	375	1.4
\$0.39 - \$0.48.....	2,994	9.3	1,242	4.6
\$0.49 - \$0.54.....	4,771	14.9	2,439	9.1
\$0.55 - \$0.61.....	1,711	5.2	1,013	3.8
\$0.62 - \$0.69.....	2,128	6.6	1,370	5.1
\$0.70 - \$0.78.....	1,393	4.3	1,035	3.9
\$0.79 - \$0.88.....	3,454	10.6	3,050	11.4
\$0.89 - \$1.11.....	8,369	25.9	8,861	33.1
\$1.12 - \$1.41.....	4,918	15.2	6,965	26.0
\$1.42 and over.....	36	1.1	174	0.6
Washed, screened, ground, or otherwise prepared, total..	231,029	100.0	238,358	100.0
Less than \$0.38.....	4,008	1.7	1,080	0.5
\$0.38 - \$0.48.....	4,168	1.8	1,707	0.8
\$0.49 - \$0.54.....	5,080	2.2	2,618	1.1
\$0.55 - \$0.61.....	11,181	4.8	6,534	2.7
\$0.62 - \$0.69.....	12,568	5.4	8,200	3.4
\$0.70 - \$0.78.....	23,372	10.1	17,131	7.2
\$0.79 - \$0.88.....	45,765	19.8	40,365	16.9
\$0.89 - \$1.11.....	62,293	27.0	69,641	29.2
\$1.12 - \$1.25.....	26,407	11.3	33,046	13.9
\$1.26 - \$1.41.....	13,357	5.7	17,847	7.5
\$1.42 - \$1.59.....	9,514	4.0	15,045	6.3
\$1.60 - \$1.79.....	6,757	2.8	11,349	4.8
\$1.80 - \$2.04.....	4,933	2.0	9,400	3.9
\$2.05 - \$2.59.....	753	0.3	1,773	0.7
\$2.60 - \$3.34.....	689	0.2	1,883	0.8
\$3.35 and over.....	184	0.8	739	0.3
Glass sand, total.....	8,097	100.0	27,210	100.0
Less than \$1.12.....	34	0.4	32	0.1
\$1.12 - \$1.79.....	240	3.0	303	1.1
\$1.80 - \$2.29.....	1,191	14.7	2,591	9.5
\$2.30 - \$2.94.....	1,999	24.7	5,099	18.8
\$2.95 - \$3.34.....	404	5.0	1,225	4.5
\$3.35 - \$4.29.....	2,532	31.2	9,651	35.5
\$4.30 - \$6.14.....	1,250	15.4	5,478	20.1
\$6.15 and over.....	447	5.6	2,831	10.4
Molding sand, total.....	7,757	100.0	20,988	100.0
Less than \$0.89.....	351	4.5	157	0.7
\$0.89 - \$1.11.....	595	7.7	567	2.7
\$1.12 - \$1.79.....	845	10.8	1,417	6.8
\$1.80 - \$2.29.....	325	4.2	678	3.2
\$2.30 - \$2.94.....	1,479	19.1	3,705	17.7
\$2.95 - \$3.34.....	1,880	24.3	5,650	26.9
\$3.35 - \$4.29.....	1,340	17.3	4,605	21.9
\$4.30 and over.....	942	12.1	4,209	20.1
Industrial sand, n.e.c., total.....	5,528	100.0	22,693	100.0
Less than \$0.89.....	645	11.7	507	2.2
\$0.89 - \$1.25.....	241	4.4	257	1.1
\$1.26 - \$1.79.....	680	12.3	1,065	4.7
\$1.80 - \$2.29.....	277	5.0	560	2.5
\$2.30 - \$2.94.....	320	6.0	824	3.6
\$2.95 - \$3.34.....	337	6.0	1,032	4.6
\$3.35 - \$4.29.....	541	10.0	2,018	8.9
\$4.30 - \$6.14.....	1,160	21.0	6,099	26.9
\$6.15 and over.....	1,327	24.0	10,331	45.5
<b>Gravel:</b>				
Run of pit or bank, total.....	44,080	100.0	35,246	100.0
Less than \$0.23.....	798	1.8	142	0.4
\$0.23 - \$0.29.....	1,216	2.8	313	0.9
\$0.30 - \$0.38.....	2,922	6.6	1,002	2.8
\$0.39 - \$0.48.....	3,189	7.2	1,360	3.9
\$0.49 - \$0.54.....	7,000	15.9	3,436	9.7
\$0.55 - \$0.61.....	2,062	4.7	1,192	3.4
\$0.62 - \$0.69.....	2,178	4.9	1,409	4.1
\$0.70 - \$0.78.....	3,497	7.9	2,525	7.2
\$0.79 - \$0.88.....	2,920	6.6	2,521	7.1
\$0.89 - \$1.11.....	11,259	25.4	11,488	32.6
\$1.12 - \$1.41.....	7,024	15.9	9,750	27.6
\$1.42 and over.....	15	0.03	108	0.3

See footnotes at end of table.

TABLE 6C. Shipments of Primary Products Distributed by Value  
Per Ton: 1963—Continued

Product and average value per ton f.o.b. mine or plant <sup>1</sup>	Quantity shipped		Value of shipments	
	Short tons (1,000)	Percent of total quantity	Value (\$1,000)	Percent of total value
Gravel—Continued				
Washed, screened, or otherwise prepared, total.....	280,865	100.0	328,812	100.0
Less than \$0.34.....	3,031	1.1	962	0.3
\$0.34 - \$0.48.....	1,655	0.6	728	0.2
\$0.49 - \$0.54.....	5,333	1.9	2,737	0.8
\$0.55 - \$0.61.....	5,273	1.9	3,102	0.9
\$0.62 - \$0.69.....	6,213	2.2	4,189	1.2
\$0.70 - \$0.78.....	11,137	4.0	8,594	2.6
\$0.79 - \$0.88.....	43,259	15.4	38,048	11.6
\$0.89 - \$1.11.....	74,973	26.7	80,768	24.6
\$1.12 - \$1.25.....	38,169	13.6	43,275	13.2
\$1.26 - \$1.41.....	33,257	11.8	42,569	12.9
\$1.42 - \$1.59.....	26,674	9.5	40,719	12.4
\$1.60 - \$1.79.....	16,859	6.0	30,174	9.2
\$1.80 - \$2.04.....	7,948	2.8	14,306	4.4
\$2.05 - \$2.59.....	5,302	1.9	12,171	3.7
\$2.60 - \$3.34.....	1,370	0.5	4,476	1.4
\$3.35 and over.....	412	0.1	1,994	0.6

n.e.c. Not elsewhere classified.

<sup>1</sup>The "average values" are based on the entire shipments of the specified product by each establishment. Thus they are representative of varied average prices among establishments but not of variations within an establishment.

TABLE 7A. Supplies Used in the Industries: 1963 and 1958

(Detailed figures for the quantity and cost of supplies used were not obtained for this industry. For the total cost of supplies used, see tables 3A and 3B. For the quantity and cost of sand and gravel received for preparation, see table 6A. For the quantity and total cost of purchased fuels and electric energy used, see tables 3A and 3B.)

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954

Industry and geographic area	Aggregate horsepower per production worker		1963 (1,000 hp.)									
			Aggregate horsepower (prime movers and electric motors driven by purchased energy)					Prime movers (horsepower)				
	1963	1954	Total	By type of equipment				Total	By type of equipment			
				Loading equipment	Transportation equipment		All other equipment		Loading equipment	Transportation equipment		All other equipment
					Highway type	Other				Highway type	Other	
INDUSTRY 1441.—SAND AND GRAVEL												
United States, total.....	147	105	4,851	1,237	1,732	553	1,329	3,816	1,041	1,732	480	563
Construction sand and gravel sub-industry.....	153	108	4,603	1,173	1,674	521	1,235	3,658	995	1,675	451	537
Glass sand subindustry.....	83	48	101	21	25	5	50	51	15	25	5	6
Molding sand subindustry.....	106	90	81	25	19	14	23	59	20	19	12	8
Industrial sand, n.e.c., subindustry.....	64	(1)	66	18	14	13	21	48	11	13	12	12
New England.....	157	114	263	61	132	27	43	216	56	132	18	10
Massachusetts.....	131	99	114	29	49	16	20	92	26	49	13	4
Connecticut.....	238	138	88	19	57	4	8	77	18	57	1	1
Middle Atlantic.....	123	91	455	124	155	49	127	347	106	155	43	43
New York.....	153	111	204	51	73	24	56	158	43	73	22	20
New Jersey.....	120	98	136	44	45	12	35	105	39	45	11	10
Pennsylvania.....	94	65	115	29	37	13	36	84	24	37	10	13
East North Central.....	157	108	1,120	304	345	120	351	835	239	345	109	142
Ohio.....	162	98	334	89	96	40	109	246	77	96	35	38
Indiana.....	148	115	139	39	30	18	52	91	34	30	17	10
Illinois.....	134	87	226	65	50	34	77	172	42	50	34	46
Michigan.....	157	118	229	74	70	14	71	164	56	70	12	26
Wisconsin.....	198	146	192	37	99	14	42	162	30	99	11	22
West North Central.....	160	129	615	145	233	63	174	500	122	233	55	90
Minnesota.....	152	148	149	36	63	16	34	127	33	63	15	16
Iowa.....	178	163	111	26	40	13	32	85	22	40	10	13
Missouri.....	133	74	75	20	20	12	23	57	17	20	10	10
Nebraska.....	141	127	101	16	39	5	41	82	14	39	5	24
Kansas.....	178	141	84	30	30	2	22	70	24	30	1	15
South Atlantic.....	139	76	496	125	164	51	156	388	107	164	45	72
Maryland.....	144	77	126	35	42	14	35	96	28	42	12	14
Virginia.....	131	92	89	22	32	7	28	69	21	32	6	10
West Virginia.....	57	42	28	15	6	2	5	23	12	6	3	2
North Carolina.....	126	76	67	13	17	9	28	55	11	17	8	19
Florida.....	212	67	87	20	31	12	24	69	19	31	10	9
East South Central.....	127	65	244	62	94	42	46	204	48	94	35	27
Kentucky.....	104	79	31	12	5	7	7	26	10	5	7	4
Tennessee.....	112	50	65	10	24	17	14	55	9	24	14	8
Alabama.....	123	81	63	20	22	6	15	51	15	22	4	10
Mississippi.....	160	64	85	20	43	12	10	72	14	43	10	5
West South Central.....	142	70	537	135	213	68	121	438	114	213	55	56
Arkansas.....	104	60	44	9	14	3	18	38	8	14	4	12
Louisiana.....	125	56	123	36	42	13	32	95	27	42	9	17
Oklahoma.....	135	84	45	12	15	5	13	33	8	15	2	8
Texas.....	159	76	325	78	142	47	58	272	71	142	40	19
Mountain.....	138	170	300	66	107	44	83	255	61	107	41	46
Colorado.....	127	131	68	20	12	10	26	34	17	12	10	15
Arizona.....	158	177	80	20	31	10	19	68	19	31	9	9
Utah.....	119	138	36	10	8	10	8	31	9	8	9	5
Pacific.....	155	140	821	215	289	89	228	633	188	289	79	77
Washington.....	177	167	74	17	28	5	24	53	13	28	3	9
Oregon.....	120	113	101	20	41	10	30	83	17	41	10	15
California.....	160	141	633	173	213	74	173	485	153	213	66	53

See footnotes at end of table.

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954—Continued

Industry and geographic area	1963 (1,000 hp.)--Continued							
	Prime movers (horsepower)--Continued		Electric motors (horsepower)					
	By use		Total	By type of equipment			By source of power	
	Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated at same establishment
INDUSTRY 1441.—SAND AND GRAVEL								
United States, total.....	182	3,634	1,073	199	78	796	1,035	38
Construction sand and gravel sub-industry.....	151	3,507	974	179	72	723	945	29
Glass sand subindustry.....	10	41	50	6	-	44	50	-
Molding sand subindustry.....	12	47	22	5	2	15	22	-
Industrial sand, n.e.c., subindustry.....	9	39	27	9	4	14	18	9
New England.....	8	208	47	5	9	33	47	-
Massachusetts.....	5	87	22	3	3	16	22	-
Connecticut.....	2	75	11	1	3	7	11	-
Middle Atlantic, total.....	20	327	112	18	6	88	108	4
New York.....	11	147	46	8	2	36	46	-
New Jersey.....	4	101	33	5	1	27	31	2
Pennsylvania.....	5	79	33	5	3	25	31	2
East North Central, total.....	47	788	303	69	13	221	285	18
Ohio.....	17	229	94	13	5	76	88	6
Indiana.....	2	89	48	6	1	41	48	-
Illinois.....	18	154	64	25	2	37	54	10
Michigan.....	5	159	65	18	2	45	65	-
Wisconsin.....	5	157	32	7	3	22	30	2
West North Central.....	20	480	119	23	8	88	115	4
Minnesota.....	1	126	23	3	1	19	22	1
Iowa.....	5	80	28	4	3	21	26	2
Missouri.....	5	52	18	3	2	13	18	-
Nebraska.....	1	81	19	2	-	17	19	-
Kansas.....	5	65	15	6	1	8	14	1
South Atlantic.....	17	371	112	18	8	86	108	4
Maryland.....	9	87	30	7	2	21	30	-
Virginia.....	3	66	20	1	1	18	20	-
West Virginia.....	5	18	9	3	1	5	5	4
North Carolina.....	-	55	12	2	1	9	12	-
Florida.....	-	69	18	1	2	15	18	-
East South Central, total.....	11	193	40	14	7	19	40	-
Kentucky.....	4	22	5	2	-	3	5	-
Tennessee.....	4	51	10	2	3	5	10	-
Alabama.....	1	50	12	5	2	5	12	-
Mississippi.....	2	70	13	5	2	6	13	-
West South Central, total.....	22	416	104	21	14	69	99	5
Arkansas.....	4	34	10	1	-	9	6	4
Louisiana.....	2	93	28	9	4	15	28	-
Oklahoma.....	1	32	13	4	3	6	12	1
Texas.....	15	257	53	7	7	39	53	-
Mountain.....	11	244	46	5	3	38	45	1
Colorado.....	4	50	14	3	-	11	14	-
Arizona.....	3	65	12	1	1	10	12	-
Utah.....	1	30	5	1	1	3	5	-
Pacific.....	26	607	190	27	10	153	188	2
Washington.....	1	52	22	4	2	16	21	1
Oregon.....	2	81	18	3	-	15	18	-
California.....	22	463	149	20	8	121	148	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Figures for the Industrial Sand, N.E.C., Subindustry are included with those for the Construction Sand and Gravel Subindustry.

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with an average employment of--						
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
INDUSTRY 1441.—SAND AND GRAVEL								
Establishments.....number..	4,616	4,523	73	18	2	-	-	-
Reporting water use, total.....do...	1,923	1,849	58	14	2	-	-	-
By source of water:								
Utility.....do...	271	267	3	1	-	-	-	-
Other than utility.....do...	1,258	1,194	49	13	2	-	-	-
Source not specified.....do...	394	388	6	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do...	1,191	1,170	20	1	-	-	-	-
1 to 9 million gallons.....do...	202	195	6	1	-	-	-	-
10 to 19 million gallons.....do...	60	60	-	-	-	-	-	-
20 to 99 million gallons.....do...	213	208	5	-	-	-	-	-
100 million gallons and over.....do...	257	216	27	12	2	-	-	-
Employees.....do...	140,142	31,122	4,738	3,224	(D)	-	-	-
Establishments reporting water use.....do...	29,071	22,399	3,927	2,745	(D)	-	-	-
Value added in mining.....\$1,000..	513,728	408,694	61,733	43,301	(D)	-	-	-
Value added at establishments reporting water use.....do...	321,663	231,710	54,049	35,904	(D)	-	-	-
Construction Sand and Gravel Subindustry								
Establishments.....number..	4,419	4,340	63	16	-	-	-	-
Reporting water use, total.....do...	1,782	1,720	50	12	-	-	-	-
By source of water:								
Utility.....do...	257	253	3	1	-	-	-	-
Other than utility.....do...	1,147	1,095	41	11	-	-	-	-
Source not specified.....do...	378	372	6	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do...	1,107	1,087	19	1	-	-	-	-
1 to 9 million gallons.....do...	186	180	5	1	-	-	-	-
10 to 19 million gallons.....do...	56	56	-	-	-	-	-	-
20 to 99 million gallons.....do...	202	198	4	-	-	-	-	-
100 million gallons and over.....do...	231	199	22	10	-	-	-	-
Employees.....do...	136,394	29,084	4,069	2,326	-	-	-	-
Establishments reporting water use.....do...	25,715	20,465	3,403	1,847	-	-	-	-
Value added in mining.....\$1,000..	459,288	380,077	50,517	28,694	-	-	-	-
Value added at establishments reporting water use.....do...	271,829	204,384	46,148	21,297	-	-	-	-
Glass Sand Subindustry								
Establishments.....number..	39	32	5	1	1	-	-	-
Reporting water use, total.....do...	37	30	5	1	1	-	-	-
By source of water:								
Utility.....do...	3	3	-	-	-	-	-	-
Other than utility.....do...	31	24	5	1	1	-	-	-
Source not specified.....do...	3	3	-	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do...	8	8	-	-	-	-	-	-
1 to 9 million gallons.....do...	6	5	1	-	-	-	-	-
10 to 19 million gallons.....do...	3	3	-	-	-	-	-	-
20 to 99 million gallons.....do...	8	7	1	-	-	-	-	-
100 million gallons and over.....do...	12	7	3	1	1	-	-	-
Employees.....do...	11,570	636	839	(D)	(D)	-	-	-
Value added in mining.....\$1,000..	22,648	9,907	12,741	(D)	(D)	-	-	-
Molding Sand Subindustry								
Establishments.....number..	93	91	2	-	-	-	-	-
Reporting water use, total.....do...	57	56	1	-	-	-	-	-
By source of water:								
Utility.....do...	5	5	-	-	-	-	-	-
Other than utility.....do...	45	44	1	-	-	-	-	-
Source not specified.....do...	7	7	-	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do...	47	47	-	-	-	-	-	-
1 to 9 million gallons.....do...	4	4	-	-	-	-	-	-
10 to 19 million gallons.....do...	1	1	-	-	-	-	-	-
20 to 99 million gallons.....do...	1	1	-	-	-	-	-	-
100 million gallons and over.....do...	4	3	1	-	-	-	-	-
Employees.....do...	927	927	(D)	-	-	-	-	-
Value added in mining.....\$1,000..	12,838	12,838	(D)	-	-	-	-	-

See footnotes at end of table.

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963—Continued

Item	Establishments, total	Establishments with an average employment of--						
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
Industrial Sand, N.E.C., Subindustry								
Establishments.....number..	65	60	3	1	1	-	-	-
Reporting water use, total.....do....	47	43	2	1	1	-	-	-
By source of water:								
Utility.....do....	6	6	-	-	-	-	-	-
Other than utility.....do....	35	31	2	1	1	-	-	-
Source not specified.....do....	6	6	-	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	29	28	1	-	-	-	-	-
1 to 9 million gallons.....do....	6	6	-	-	-	-	-	-
20 to 99 million gallons.....do....	2	2	-	-	-	-	-	-
100 million gallons and over.....do....	10	7	1	1	1	-	-	-
Employees.....do....	1,251	<u>1,251</u>	(D)	(D)	(D)	-	-	-
Establishments reporting water use.....do....	1,195	<u>1,195</u>	(D)	(D)	(D)	-	-	-
Value added in mining.....\$1,000..	18,953	<u>18,953</u>	(D)	(D)	(D)	-	-	-
Value added at establishments reporting water use.....do....	17,284	<u>17,284</u>	(D)	(D)	(D)	-	-	-

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.

<sup>1</sup> Includes figures for employees at separately reported central offices and related facilities. These were not distributed by size of establishment or included in the separate figures for establishments reporting water use.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963

Type of operation and tons per man-hour <sup>1</sup>	Establish- ments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expendi- tures
		Total	Payroll	Total	Man-hours	Wages			
	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
	Construction Sand and Gravel Subindustry								
All establishments, total.....	4,419	36,394	190,924	30,024	64,014	154,546	459,288	607,539	68,954
Less than 2.00.....	225	1,542	4,403	1,322	2,915	3,905	2,758	7,096	1,388
2.00 to 3.99.....	382	4,344	18,520	3,812	8,425	16,463	34,478	43,927	4,942
4.00 to 5.99.....	486	6,153	27,236	5,232	11,525	23,063	55,959	73,270	9,620
6.00 to 7.99.....	406	4,804	25,315	4,241	9,304	22,207	57,486	76,728	9,174
8.00 to 9.99.....	248	3,466	20,589	2,855	6,259	17,015	50,892	64,796	5,318
10.00 to 11.99.....	172	2,473	15,727	1,914	4,157	12,017	39,560	49,853	5,607
12.00 to 14.99.....	174	2,249	15,171	1,746	3,632	11,555	42,407	52,376	5,280
15.00 and over.....	302	2,964	20,791	2,271	4,362	16,369	76,063	94,079	8,111
Undistributed <sup>2</sup> .....	2,024	7,504	35,683	6,631	13,435	31,952	99,685	143,414	19,514
Producing establishments:									
Bank,mining only, total.....	308	845	3,320	722	1,433	2,927	9,966	12,855	1,913
Less than 2.00.....	17	86	98	70	143	84	146	185	52
2.00 to 5.99.....	28	227	707	180	371	564	1,605	1,946	287
6.00 to 9.99.....	23	110	417	93	176	355	1,053	1,217	234
10.00 to 14.99.....	8	33	159	28	51	151	796	1,105	64
15.00 and over.....	24	60	401	49	92	319	1,520	1,784	178
Undistributed <sup>2</sup> .....	208	329	1,538	302	600	1,454	4,846	6,618	1,098
Bank,mining with preparation, screening only, total.....	96	564	2,216	470	1,016	1,822	4,925	7,627	1,089
Less than 2.00.....	5	33	133	33	66	133	85	98	13
2.00 to 3.99.....	12	144	521	124	287	437	697	1,873	175
4.00 to 5.99.....	14	128	366	93	218	262	927	1,116	160
6.00 to 7.99.....	5	28	111	23	47	95	301	344	49
8.00 to 9.99.....	8	83	317	74	152	284	707	1,229	164
10.00 to 11.99.....	5	35	165	27	41	132	497	702	105
12.00 to 14.99.....	2	35	273	26	57	172	961	1,081	76
15.00 and over.....	4								
Undistributed <sup>2</sup> .....	41	78	330	70	148	307	750	1,184	347
Bank,mining with preparation, crushing only, total.....	45	357	1,396	302	598	1,156	4,097	5,462	685
Less than 2.00.....	7	40	25	32	66	21	63	75	9
2.00 to 3.99.....	7	30	87	26	51	81	228	288	31
4.00 to 5.99.....	10	109	363	86	177	290	908	1,095	156
6.00 to 7.99.....	4	33	117	24	59	86	309	398	50
8.00 to 9.99.....	2	46	260	41	63	222	677	758	33
12.00 to 14.99.....	2								
15.00 and over.....	3	5	53	4	8	49	139	159	23
Undistributed <sup>2</sup> .....	10	94	491	89	174	407	1,773	2,689	383

See footnotes at end of table.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963—Continued

Type of operation and tons per man-hour <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
Construction Sand and Gravel Subindustry—Continued									
Producing establishments—Continued									
Bank, mining with preparation, excluding crushing or screening only, total.....	314	2,973	17,884	2,422	5,074	14,102	41,320	52,584	7,584
Less than 2.00.....	9	101	359	91	210	328	371	641	109
2.00 to 3.99.....	25	246	1,157	228	498	1,040	1,754	1,985	444
4.00 to 5.99.....	39	342	1,901	265	564	1,329	2,796	3,618	344
6.00 to 7.99.....	34	349	1,979	284	657	1,605	4,220	5,196	929
8.00 to 9.99.....	27	512	3,803	360	854	2,728	6,218	7,763	707
10.00 to 11.99.....	16	172	1,165	143	319	1,007	4,223	5,032	270
12.00 to 14.99.....	16	186	1,369	144	289	949	4,007	4,626	519
15.00 and over.....	24	349	2,790	268	486	2,147	9,071	11,120	1,979
Undistributed <sup>2</sup> .....	124	716	3,361	639	1,197	2,969	8,660	12,603	2,229
Bank and wet pit, total.....	213	2,364	12,131	1,978	4,592	9,665	28,006	37,982	4,229
Less than 2.00.....	10	78	202	64	154	189	107	208	119
2.00 to 3.99.....	26	325	1,361	281	718	1,193	2,546	3,772	444
4.00 to 5.99.....	44	636	2,670	578	1,428	2,432	6,966	9,008	1,330
6.00 to 7.99.....	26	215	1,100	187	428	963	2,976	3,574	519
8.00 to 9.99.....	13	175	833	152	331	700	1,931	2,631	189
10.00 to 11.99.....	14	224	1,417	182	414	1,048	3,037	4,221	149
12.00 to 14.99.....	15	215	1,788	156	332	1,150	3,456	4,401	319
15.00 and over.....	12	79	511	67	143	424	1,901	2,464	309
Undistributed <sup>2</sup> .....	53	417	2,249	311	644	1,566	5,086	7,703	509
Bank and dry pit, total.....	244	2,883	15,164	2,570	5,162	14,411	45,588	57,653	5,339
Less than 2.00.....	9	53	49	42	82	43	91	110	119
2.00 to 3.99.....	18	134	486	104	239	430	1,092	1,311	444
4.00 to 5.99.....	37	434	1,870	366	772	1,626	3,982	4,986	519
6.00 to 7.99.....	21	346	1,871	313	626	1,645	4,270	5,330	719
8.00 to 9.99.....	16	268	1,523	207	397	1,153	4,065	5,095	219
10.00 to 11.99.....	16	277	1,822	245	508	1,595	4,218	5,663	619
12.00 to 14.99.....	14	204	1,195	137	267	912	3,869	4,070	419
15.00 and over.....	31	397	2,970	323	642	2,295	12,838	14,899	919
Undistributed <sup>2</sup> .....	82	770	3,378	833	1,629	4,712	11,163	16,189	1,519
Wet pit, mining only, total.....	64	252	1,185	245	500	1,131	3,662	4,458	1,339
Less than 2.00.....	3	13	24	13	26	24	87	60	119
2.00 to 5.00.....	8	84	352	80	160	321	737	999	219
6.00 to 9.99.....	11	47	258	46	97	252	828	793	219
10.00 to 14.99.....	8	50	295	48	102	278	758	1,115	119
15.00 and over.....	3	10	63	10	20	63	161	348	419
Undistributed <sup>2</sup> .....	31	48	193	48	95	193	1,091	1,143	519
Wet pit, mining with preparation, screening only, total.....	101	872	3,493	743	1,547	3,044	9,088	12,018	1,229
Less than 2.00.....	11	41	40	33	68	33	96	112	119
2.00 to 5.99.....	35	461	1,703	397	829	1,498	4,419	5,637	619
6.00 to 9.99.....	22	130	609	116	243	558	1,403	2,393	219
10.00 to 14.99.....	9	87	526	68	151	425	1,626	1,981	119
15.00 and over.....	3	4	33	4	8	33	199	226	219
Undistributed <sup>2</sup> .....	21	149	582	125	248	497	1,345	1,669	219
Wet pit, mining with preparation, crushing only, total.....	78	591	2,493	512	1,014	2,202	5,343	6,672	719
Less than 2.00.....	15	71	90	61	114	84	211	234	119
2.00 to 5.99.....	32	334	1,309	288	583	1,229	2,202	2,921	419
6.00 to 9.99.....	16	91	424	81	163	383	1,053	1,307	119
10.00 to 14.99.....	2	73	561	65	130	500	1,622	1,867	119
15.00 and over.....	3	10	63	10	20	63	161	348	419
Undistributed <sup>2</sup> .....	10	22	109	17	24	6	255	343	119
Wet pit, mining with preparation, excluding crushing or screening only, total.....	727	6,337	32,440	5,461	12,020	28,151	87,863	114,563	11,119
Less than 2.00.....	20	110	360	98	211	314	252	464	119
2.00 to 3.99.....	56	781	2,958	696	1,492	2,728	6,556	8,572	719
4.00 to 5.99.....	66	842	3,985	729	1,735	3,422	8,335	10,870	1,719
6.00 to 7.99.....	84	1,307	6,856	1,157	2,680	6,014	17,474	23,383	2,419
8.00 to 9.99.....	45	563	3,339	464	1,075	2,954	9,731	11,479	1,719
10.00 to 11.99.....	41	616	3,608	517	1,131	3,059	10,824	12,643	1,719
12.00 to 14.99.....	30	466	2,815	385	844	2,367	9,519	11,741	1,719
15.00 and over.....	41	361	2,247	290	557	1,841	8,992	10,969	1,719
Undistributed <sup>2</sup> .....	344	1,291	6,272	1,125	2,295	5,452	16,180	24,442	3,019
Dry pit, mining only, total.....	307	900	2,960	774	1,518	2,597	8,169	10,282	2,019
Less than 2.00.....	20	78	93	66	134	83	168	196	119
2.00 to 3.99.....	24	99	252	82	155	223	391	425	119
4.00 to 5.99.....	32	296	1,007	242	495	830	2,386	2,926	419
6.00 to 7.99.....	15	40	196	37	74	183	393	529	119
8.00 to 9.99.....	8	95	383	78	135	322	1,117	1,536	119
10.00 to 11.99.....	7	27	128	19	38	101	330	356	119
12.00 to 14.99.....	5	24	96	22	42	92	301	356	119
15.00 and over.....	14	38	248	30	57	210	777	878	119
Undistributed <sup>2</sup> .....	182	203	557	198	388	553	2,306	3,080	1,019

See footnotes at end of table.



TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963—Continued

Type of operation and tons per man-hour <sup>1</sup>	Establish- ments	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expend- itures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
	(number)	(number)	(number)	(1,000)	(number)	(1,000)	(1,000)	(1,000)	(1,000)
Construction Sand and Gravel Subindustry—Continued									
Producing establishments—Continued									
Dry pit, mining with preparation, screening only, total.....	327	1,144	4,700	971	2,006	4,079	11,937	16,129	1,715
Less than .00.....	24	102	181	86	177	154	134	295	63
2.00 to 3.99.....	31	178	565	154	318	506	1,079	1,273	167
4.00 to 5.99.....	35	407	1,693	332	723	1,412	3,371	4,824	517
6.00 to 7.99.....	25	144	627	124	255	556	736	1,556	297
8.00 to 9.99.....	8	39	224	33	70	196	359	575	40
10.00 to 11.99.....	3	}	11	82	9	19	72	178	250
12.00 to 14.99.....	1								
15.00 and over.....	9								
Undistributed <sup>2</sup> .....	191	225	1,030	200	381	925	4,869	5,862	519
Dry pit, mining with preparation, crushing									
only, total.....	162	1,092	4,413	919	1,907	3,946	12,203	17,511	2,007
Less than 2.00.....	17	60	50	52	104	45	107	140	11
2.00 to 3.99.....	23	115	324	100	219	290	616	1,049	138
4.00 to 5.99.....	40	456	1,630	376	772	1,378	3,926	5,021	669
6.00 to 7.99.....	21	151	615	133	267	560	1,536	1,936	353
8.00 to 9.99.....	2	}	76	531	67	144	493	1,477	1,928
10.00 to 11.99.....	1								
12.00 to 14.99.....	5								
15.00 and over.....	16	87	416	74	156	410	2,148	3,672	237
Undistributed <sup>2</sup> .....	37	128	722	102	215	669	2,041	3,364	293
Dry pit, mining with preparation, excluding screening or crushing only, total.....									
Less than 2.00.....	34	380	1,401	353	785	1,338	1,562	2,339	371
2.00 to 3.99.....	62	739	3,453	643	1,368	2,873	5,533	7,203	690
4.00 to 5.99.....	69	1,098	5,644	979	2,101	5,043	10,823	14,315	1,134
6.00 to 7.99.....	87	1,233	6,905	1,115	2,389	6,114	14,570	19,921	1,564
8.00 to 9.99.....	46	643	3,764	548	1,236	3,160	10,786	13,729	1,347
10.00 to 11.99.....	36	557	3,474	455	1,016	2,833	9,025	12,017	1,186
12.00 to 14.99.....	43	530	3,592	380	749	2,440	9,293	12,300	1,781
15.00 and over.....	67	965	6,928	719	1,449	5,464	25,453	31,077	2,305
Undistributed <sup>2</sup> .....	489	1,948	10,120	1,627	3,581	8,113	30,860	44,531	5,580
All other producing establishments, total...	453	5,991	33,473	4,916	10,586	27,121	69,621	94,288	11,462
Less than 2.00.....	24	296	1,298	228	575	1,032	722	1,939	371
2.00 to 3.99.....	47	1,000	5,321	903	2,109	4,856	9,505	12,425	1,094
4.00 to 5.99.....	48	852	4,071	713	1,568	3,233	7,057	9,739	1,790
6.00 to 7.99.....	48	769	4,087	676	1,483	3,612	8,533	11,706	1,904
8.00 to 9.99.....	37	849	5,348	733	1,607	4,611	13,338	17,384	1,458
10.00 to 11.99.....	20	388	2,720	166	357	1,098	3,626	4,424	1,074
12.00 to 14.99.....	27	455	3,229	377	808	2,678	8,690	10,805	1,069
15.00 and over.....	46	537	3,556	376	630	2,686	10,679	13,895	1,040
Undistributed <sup>2</sup> .....	156	845	3,846	744	1,449	3,315	7,471	11,971	1,660
Glass Sand Subindustry									
All establishments, total.....	39	1,570	9,140	1,223	2,738	6,650	22,648	29,099	3,998
Less than 1.00.....	2	}	585	3,042	459	998	2,171	6,379	7,887
1.00 to 1.49.....	5								
1.50 to 1.99.....	6								
2.00 to 2.99.....	8	289	1,862	250	598	1,559	6,667	8,034	2,021
3.00 to 3.99.....	6	127	778	112	238	644	2,089	3,062	203
4.00 to 4.99.....	1	}	53	371	43	93	288	1,968	2,667
5.00 to 5.99.....	2								
6.00 and over.....	1								
Undistributed <sup>2</sup> .....	8	176	1,125	68	171	343	1,422	1,726	210
Molding Sand Subindustry									
All establishments, total.....	93	927	4,992	764	1,546	3,776	12,838	16,642	904
Less than 1.00.....	3	23	61	14	22	40	17	30	3
1.00 to 1.49.....	4	51	215	44	86	189	315	394	11
1.50 to 1.99.....	9	152	780	139	254	699	2,035	2,765	107
2.00 to 2.99.....	13	149	755	139	269	688	2,341	2,951	129
3.00 to 3.99.....	7	60	249	60	103	249	999	1,163	85
4.00 to 4.99.....	3	111	572	94	184	480	2,148	2,526	37
5.00 to 5.99.....	1	62	398	54	106	326	1,489	1,788	126
6.00 and over.....	6	73	684	58	180	518	1,688	2,049	169
Undistributed <sup>2</sup> .....	44	246	1,278	162	342	587	1,806	2,976	237

See footnotes at end of table.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963—Continued

Type of operation and tons per man-hour <sup>1</sup>	Establish- ments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expend- itures
		Total	Payroll	Total	Man-hours	Wages			
	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
	Industrial Sand, N.E.C., Subindustry								
All establishments, total.....	65	1,251	7,104	1,031	2,322	5,361	18,953	24,788	1,868
Less than 1.00.....	15	432	2,326	378	976	1,905	5,707	8,044	621
1.00 to 1.49.....	12	528	3,224	414	898	2,245	8,580	10,778	738
1.50 to 1.99.....	3	26	147	18	44	87	296	379	75
2.00 to 2.99.....	6	55	209	46	77	234	581	759	31
3.00 to 3.99.....	2								
4.00 to 4.99.....	5								
5.00 to 5.99.....	3	44	257	25	54	125	640	766	57
6.00 and over.....	3	34	230	28	47	179	595	827	41
Undistributed <sup>2</sup> .....	6	63	333	59	73	318	1,491	1,814	119
	13	69	378	63	153	268	1,063	1,421	186

n.e.c. Not elsewhere classified.

<sup>1</sup>Represents tons of primary products of the subindustry shipped per man-hour worked by production, development, and exploration workers.

<sup>2</sup>Represents establishments reporting no shipments of primary products or no production, development, or exploration worker man-hours; or cost of contract work amounting to 30 percent or more of production, development, or exploration worker wages; or number of working proprietors amounting to 30 percent or more of number of production, development, or exploration workers; or man-hours spent on development and exploration work amounting to 30 percent or more of total man-hours worked by production, development, and exploration workers. For all employees, for all establishments, for each subindustry, includes data for separately reported central offices and related facilities; for figures by type of operation, excludes data for central offices and related facilities.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining, by Geographic Areas: 1963

Ratio of payroll to value added in mining and geographic area <sup>1</sup>	Establishments  (number)	All employees		Production, development, and exploration workers			Value added in mining  (\$1,000)	Value of shipments and receipts  (\$1,000)	Capital expendi- tures  (\$1,000)
		Total  (number)	Payroll  (\$1,000)	Total  (number)	Man-hours  (1,000)	Wages  (\$1,000)			
Construction Sand and Gravel Subindustry									
United States, total.....	4,419	36,394	190,924	30,024	64,014	154,546	459,288	607,539	68,954
Under 0.10.....	100	240	741	224	443	673	14,601	15,423	1,954
0.10 to 0.19.....	266	1,622	8,205	1,413	3,157	7,508	51,273	60,905	5,818
0.20 to 0.29.....	666	6,883	33,821	5,841	12,440	28,501	95,507	118,401	12,880
0.30 to 0.39.....	714	7,426	37,636	6,345	13,354	31,943	106,461	132,008	14,302
0.40 to 0.49.....	621	6,642	33,184	5,636	11,944	27,859	91,305	115,283	12,631
0.50 to 0.59.....	389	3,732	20,245	3,145	6,721	16,704	37,571	52,837	5,859
0.60 to 0.69.....	219	2,172	12,055	1,839	4,032	10,070	18,710	28,521	3,338
0.70 to 0.79.....	138	1,568	9,263	1,269	2,862	7,518	12,365	20,525	2,304
0.80 to 0.89.....	115	1,168	6,773	923	1,863	5,385	7,993	13,759	1,101
0.90 to 0.99.....	60	973	5,859	760	1,656	4,474	6,248	9,516	1,339
1.00 and over.....	352	2,681	14,409	1,974	4,206	10,118	8,440	20,532	4,299
Undistributed <sup>2</sup> .....	779	1,287	8,733	655	1,336	3,793	8,814	19,829	3,129
New England, total.....	252	1,910	10,556	1,630	3,417	8,635	21,346	28,526	4,503
Less than 0.10.....	3	3	5	3	6	5	168	173	12
0.10 to 0.19.....	12	26	112	24	48	99	676	744	91
0.20 to 0.29.....	29	234	1,190	207	421	1,047	3,218	4,050	620
0.30 to 0.39.....	46	384	1,903	330	673	1,676	5,149	6,486	992
0.40 to 0.49.....	40	328	1,666	289	589	1,466	4,505	5,678	868
0.50 to 0.59.....	39	328	1,980	277	575	1,552	3,701	5,081	894
0.60 to 0.69.....	17	166	1,050	126	304	685	1,575	2,180	263
0.70 to 0.79.....	5	83	701	65	141	483	901	1,318	223
0.80 to 0.89.....	9	74	468	64	138	366	553	814	133
0.90 to 0.99.....	4	63	385	48	110	288	421	622	185
1.00 and over.....	24	169	850	149	313	729	506	1,188	173
Undistributed <sup>2</sup> .....	24	52	246	48	99	239	(3)	192	49
Middle Atlantic, total.....	378	3,511	20,720	2,873	5,911	16,322	48,419	61,442	6,112
Less than 0.10.....	5	11	30	11	25	30	445	543	120
0.10 to 0.19.....	30	148	755	110	236	655	4,507	5,840	330
0.20 to 0.29.....	45	495	2,830	432	888	2,455	8,214	9,834	990
0.30 to 0.39.....	93	1,030	5,897	901	1,849	5,116	17,112	20,489	2,062
0.40 to 0.49.....	49	536	3,066	469	961	2,660	8,898	10,655	1,073
0.50 to 0.59.....	29	387	2,070	331	627	1,668	3,830	5,061	500
0.60 to 0.69.....	17	156	935	138	297	794	1,499	1,979	268
0.70 to 0.79.....	15	79	483	65	142	409	659	918	55
0.80 to 0.89.....	13	77	448	64	132	366	531	779	117
0.90 to 0.99.....	12	234	1,874	155	325	1,216	2,009	2,673	113
1.00 and over.....	31	168	909	142	328	703	703	1,958	440
Undistributed <sup>2</sup> .....	39	190	1,423	55	101	223	12	713	44
East North Central, total.....	1,175	7,931	43,415	6,258	13,231	33,595	104,280	134,583	14,919
Less than 0.10.....	28	60	233	55	121	198	3,048	3,573	286
0.10 to 0.19.....	71	354	1,533	291	613	1,399	9,892	11,124	847
0.20 to 0.29.....	164	1,423	7,540	1,177	2,488	6,212	22,358	26,896	3,131
0.30 to 0.39.....	180	1,556	8,246	1,288	2,721	6,795	24,320	29,418	3,424
0.40 to 0.49.....	171	1,468	7,775	1,214	2,565	6,408	22,809	27,736	3,228
0.50 to 0.59.....	113	764	3,851	630	1,249	3,115	7,046	9,408	797
0.60 to 0.69.....	64	494	2,632	420	912	2,203	4,078	5,951	939
0.70 to 0.79.....	54	559	3,478	436	988	2,746	4,613	7,240	659
0.80 to 0.89.....	34	253	1,772	190	421	1,227	2,091	3,981	173
0.90 to 0.99.....	13	85	428	57	129	331	454	671	108
1.00 and over.....	86	562	3,098	410	843	2,311	1,972	4,283	822
Undistributed <sup>2</sup> .....	197	353	2,829	90	181	650	1,599	4,302	505
West North Central, total.....	816	4,411	21,043	3,675	7,798	17,478	47,053	65,002	7,549
Less than 0.10.....	19	40	74	38	77	64	1,020	1,156	140
0.10 to 0.19.....	37	121	474	89	239	445	2,919	3,529	361
0.20 to 0.29.....	138	961	4,425	832	1,813	3,884	12,666	15,926	1,659
0.30 to 0.39.....	112	782	3,602	677	1,476	3,159	10,309	12,962	1,350
0.40 to 0.49.....	71	492	2,263	425	927	1,983	6,480	8,149	849
0.50 to 0.59.....	67	506	2,557	438	960	2,203	4,780	6,617	868
0.60 to 0.69.....	34	243	1,243	191	366	957	1,908	3,219	398
0.70 to 0.79.....	22	122	565	110	250	523	764	1,192	263
0.80 to 0.89.....	22	333	1,378	274	396	1,178	1,608	2,348	114
0.90 to 0.99.....	12	125	558	104	235	451	591	991	121
1.00 and over.....	78	462	2,449	379	807	2,015	1,581	3,840	732
Undistributed <sup>2</sup> .....	204	224	1,455	108	252	616	2,427	5,073	694

See footnotes at end of table.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining, by Geographic Areas: 1963—Continued

Ratio of payroll to value added in mining and geographic area <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
Construction Sand and Gravel Subindustry—Continued									
South Atlantic, total.....	339	3,662	16,629	3,035	6,900	13,604	44,536	58,966	6,739
Less than 0.10.....	12	23	52	20	38	47	904	1,068	85
0.10 to 0.19.....	24	141	800	122	266	686	4,955	5,888	528
0.20 to 0.29.....	63	954	4,218	797	1,810	3,472	12,060	15,000	1,593
0.30 to 0.39.....	66	1,008	4,459	845	1,915	3,674	12,749	15,833	1,684
0.40 to 0.49.....	50	763	3,374	651	1,477	2,825	8,647	11,898	1,273
0.50 to 0.59.....	26	211	930	174	398	768	1,736	2,628	295
0.60 to 0.69.....	11	182	954	153	367	815	1,461	2,861	219
0.70 to 0.79.....	3	89	501	54	115	319	649	1,062	75
0.80 to 0.89.....	8								
0.90 to 0.99.....	4								
1.00 and over.....	20								
Undistributed <sup>2</sup> .....	52	64	249	43	86	172	421	1,043	397
East South Central, total.....	172	2,132	9,134	1,778	4,077	7,511	21,095	29,563	3,160
Less than 0.10.....	3	6	20	6	13	20	443	564	63
0.10 to 0.19.....	9	49	212	34	70	138	1,377	1,955	190
0.20 to 0.29.....	36	391	1,538	334	735	1,321	4,316	5,601	632
0.30 to 0.39.....	38	413	1,625	353	777	1,396	4,562	5,921	669
0.40 to 0.49.....	29	323	1,330	267	587	1,056	3,453	4,480	505
0.50 to 0.59.....	11	308	1,553	253	623	1,350	3,023	4,287	371
0.60 to 0.69.....	8	163	642	158	348	612	1,025	1,722	139
0.70 to 0.79.....	5	192	925	126	378	667	1,165	1,838	125
0.80 to 0.89.....	1								
0.90 to 0.99.....	12								
1.00 and over.....	20								
Undistributed <sup>2</sup> .....	20	37	206	27	56	157	951	1,236	130
West South Central, total.....	406	4,183	17,321	3,505	7,898	14,410	43,458	60,681	7,027
Less than 0.10.....	7	8	24	6	14	17	509	580	59
0.10 to 0.19.....	35	332	1,453	306	786	1,351	9,385	10,863	1,631
0.20 to 0.29.....	76	934	3,686	761	1,696	2,929	9,359	12,005	1,370
0.30 to 0.39.....	28	350	1,382	286	636	1,098	3,510	4,501	513
0.40 to 0.49.....	85	1,051	4,146	857	1,907	3,296	10,528	13,506	1,541
0.50 to 0.59.....	31	453	2,034	416	966	1,880	5,791	6,193	416
0.60 to 0.69.....	20	239	1,188	196	428	999	1,831	2,986	230
0.70 to 0.79.....	12	261	1,057	202	434	789	1,442	2,958	337
0.80 to 0.89.....	7	50	213	41	84	161	252	394	69
0.90 to 0.99.....	5	149	719	137	304	659	763	1,803	159
1.00 and over.....	31	252	1,110	201	487	947	720	2,558	322
Undistributed <sup>2</sup> .....	69	104	309	96	156	284	1,568	2,334	380
Mountain, total.....	332	2,368	11,652	2,114	4,118	10,181	27,245	37,024	4,093
Less than 0.10.....	7	17	39	17	20	39	561	493	175
0.10 to 0.19.....	12	57	201	52	93	195	1,473	1,633	138
0.20 to 0.29.....	41	416	2,096	372	718	1,839	5,888	7,163	705
0.30 to 0.39.....	70	721	3,594	643	1,248	3,153	9,579	12,279	1,200
0.40 to 0.49.....	35	355	1,797	317	623	1,576	4,490	6,139	604
0.50 to 0.59.....	27	153	827	129	269	603	1,535	2,320	427
0.60 to 0.69.....	21	200	1,113	176	346	981	1,709	2,391	148
0.70 to 0.79.....	11	93	494	84	188	459	640	1,105	99
0.80 to 0.89.....	5	22	111	19	39	95	133	193	63
0.90 to 0.99.....	4	64	211	61	67	179	219	491	12
1.00 and over.....	30	201	954	184	387	860	604	1,499	375
Undistributed <sup>2</sup> .....	69	69	215	60	120	202	414	1,318	137
Pacific, total.....	549	6,286	40,454	5,156	10,664	32,810	101,656	131,752	14,852
Less than 0.10.....	16	72	264	68	129	253	7,503	7,273	1,014
0.10 to 0.19.....	36	394	2,665	375	806	2,540	16,089	19,329	1,702
0.20 to 0.29.....	74	1,075	6,298	929	1,871	5,342	17,428	21,926	2,180
0.30 to 0.39.....	81	1,182	6,928	1,022	2,059	5,876	19,171	24,119	2,398
0.40 to 0.49.....	91	1,326	7,767	1,147	2,308	6,589	21,495	27,042	2,690
0.50 to 0.59.....	46	622	4,443	497	1,054	3,565	8,129	11,242	1,291
0.60 to 0.69.....	27	329	2,298	281	664	2,024	5,232	5,232	734
0.70 to 0.79.....	11	234	1,807	208	470	1,645	2,425	4,313	527
0.80 to 0.89.....	16	215	1,635	190	409	1,470	1,932	3,831	373
0.90 to 0.99.....	6	124	1,099	109	240	960	1,189	1,465	164
1.00 and over.....	40	519	3,449	202	369	1,296	1,222	2,362	986
Undistributed <sup>2</sup> .....	105	194	1,801	128	285	1,250	1,449	3,618	793
Producing establishments by selected types of operation:									
Bank, mining only, total.....	308	845	3,320	722	1,433	2,927	9,966	12,855	1,913
Less than 0.10.....	7	7	14	7	14	14	315	342	48
0.10 to 0.19.....	16	40	160	36	68	158	1,150	1,438	86
0.20 to 0.29.....	44	234	1,135	226	445	1,115	3,298	4,166	557
0.30 to 0.39.....	40	213	559	168	343	416	1,581	1,779	270
0.40 to 0.49.....	17	163	589	128	266	480	1,373	1,839	210
0.50 to 0.59.....	19	55	202	47	84	175	375	468	120

See footnotes at end of table.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining, by Geographic Areas: 1963—Continued

Ratio of payroll to value added in mining and geographic area <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
Construction Sand and Gravel Subindustry—Continued									
Producing establishments by selected types of operation—Continued									
Bank, mining only—Continued									
0.60 to 0.69.....	8	15	75	13	23	69	115	187	19
0.70 to 0.79.....	5	12	63	10	20	57	87	158	22
0.80 to 0.89.....	6	26	151	21	40	127	170	271	23
0.90 to 0.99.....	1								
1.00 and over.....	24								
Undistributed <sup>2</sup> .....	121	23	144	19	35	129	1,394	1,885	497
Bank mining with preparation excluding screening and crushing only, total.....	314	2,973	17,884	2,422	5,074	14,002	41,320	52,584	7,583
Less than 0.10.....	2	140	734	122	277	614	5,589	6,922	591
0.10 to 0.19.....	20	498	2,917	455	895	2,585	10,633	12,500	1,312
0.20 to 0.29.....	47	407	2,358	327	672	1,831	6,744	8,143	2,531
0.30 to 0.39.....	51	548	2,916	496	1,018	2,512	6,837	8,845	908
0.40 to 0.49.....	51	374	2,385	317	698	2,103	4,497	5,884	766
0.50 to 0.59.....	41	266	1,605	204	478	1,151	2,448	3,524	373
0.60 to 0.69.....	24	114	675	90	158	487	889	1,209	195
0.70 to 0.79.....	15	51	339	42	83	293	402	508	50
0.80 to 0.89.....	9	215	1,804	135	294	1,143	1,944	2,443	276
0.90 to 0.99.....	6	311	1,912	192	416	1,076	1,228	1,998	518
1.00 and over.....	29	49	239	42	85	207	109	620	63
Undistributed <sup>2</sup> .....	19								
Bank and wet pit, total.....	213	2,364	12,131	1,978	4,592	9,665	28,006	37,982	4,232
Less than 0.10.....	3	9	41	9	19	41	421	414	30
0.10 to 0.19.....	6	25	110	22	45	100	777	1,046	28
0.20 to 0.29.....	32	354	1,568	320	758	1,423	5,384	6,429	600
0.30 to 0.39.....	56	706	3,344	627	1,438	2,907	9,124	11,597	1,282
0.40 to 0.49.....	54	553	2,308	459	986	1,948	5,585	7,379	808
0.50 to 0.59.....	12	205	1,334	117	286	704	2,490	3,455	556
0.60 to 0.69.....	16	198	1,025	184	483	873	1,597	2,536	355
0.70 to 0.79.....	6	109	784	88	215	642	1,012	1,813	210
0.80 to 0.89.....	10	116	1,046	76	173	617	1,251	2,380	114
0.90 to 0.99.....	1	98	529	66	169	374	342	819	220
1.00 and over.....	11								
Undistributed <sup>2</sup> .....	6								
Bank and dry pit, total.....	244	2,883	15,164	2,570	5,162	14,411	45,588	57,653	5,386
Less than 0.10.....	1	213	1,441	196	410	1,339	8,607	9,749	615
0.10 to 0.19.....	16	651	3,021	614	1,221	3,131	11,744	14,278	1,265
0.20 to 0.29.....	58	725	3,745	620	1,226	3,510	11,530	13,745	1,362
0.30 to 0.39.....	56	665	3,431	601	1,164	3,445	8,938	11,461	1,425
0.40 to 0.49.....	61	251	1,478	219	438	1,278	2,738	3,555	181
0.50 to 0.59.....	20	106	572	95	216	487	875	1,305	45
0.60 to 0.69.....	6	70	470	58	136	363	624	992	247
0.70 to 0.79.....	7	65	336	41	88	262	384	498	54
0.80 to 0.89.....	2								
0.90 to 0.99.....	3								
1.00 and over.....	8	118	556	111	242	514	330	1,669	172
Undistributed <sup>2</sup> .....	6	19	105	15	21	80	(3)	401	20
Wet pit mining with preparation excluding crushing or screening only, total.....	727	6,337	32,440	5,461	12,020	28,151	87,863	114,563	11,172
Less than 0.10.....	17	26	63	25	52	61	1,041	1,201	265
0.10 to 0.19.....	48	357	1,793	336	793	1,695	11,528	13,540	977
0.20 to 0.29.....	108	1,351	7,232	1,178	2,716	6,354	26,390	30,896	2,929
0.30 to 0.39.....	120	1,287	7,136	1,091	2,399	6,095	20,904	24,827	1,966
0.40 to 0.49.....	125	1,404	6,597	1,213	2,532	5,887	14,180	19,842	2,098
0.50 to 0.59.....	67	635	3,092	535	1,212	2,542	5,760	7,951	836
0.60 to 0.69.....	40	303	1,638	268	546	1,453	2,552	4,318	453
0.70 to 0.79.....	16	146	664	127	283	579	884	1,445	242
0.80 to 0.89.....	15	118	835	108	233	773	963	2,244	88
0.90 to 0.99.....	12	200	1,092	150	375	790	1,134	1,773	489
1.00 and over.....	65	422	1,896	349	742	1,567	1,216	3,599	513
Undistributed <sup>2</sup> .....	94	88	402	81	137	355	1,311	2,927	316
Dry pit, mining only, total.....	307	900	2,960	774	1,518	2,597	8,169	10,282	2,091
Less than 0.10.....	10	19	33	19	36	33	528	472	152
0.10 to 0.19.....	14	27	50	27	50	50	333	292	174
0.20 to 0.29.....	30	82	267	76	148	240	1,048	1,463	284
0.30 to 0.39.....	56	260	850	221	430	750	2,390	2,720	540
0.40 to 0.49.....	26	225	781	175	351	610	1,799	2,383	385
0.50 to 0.59.....	37	122	389	108	219	351	917	1,089	92
0.60 to 0.69.....	13	53	164	48	95	155	262	343	162
0.70 to 0.79.....	7	19	98	19	38	98	135	297	32
0.80 to 0.89.....	3	21	68	19	37	67	77	117	38
0.90 to 0.99.....	2								
1.00 and over.....	26								
Undistributed <sup>2</sup> .....	83	4	25	4	8	25	540	884	102

See footnotes at end of table.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining, by Geographic Areas: 1963—Continued

Ratio of payroll to value added in mining and geographic area <sup>1</sup>	Establishments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expendi- tures
		Total	Payroll	Total	Man-hours	Wages			
	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
Construction Sand and Gravel Subindustry—Continued									
Producing establishments by selected types of operation—Continued									
Dry pit mining with preparation excluding crushing or screening only, total.....	933	7,993	45,281	6,819	14,674	37,378	117,905	157,432	15,958
Less than 0.10.....	27	80	268	71	150	237	4,335	5,177	457
0.10 to 0.19.....	56	408	2,141	360	808	2,029	12,759	15,289	2,120
0.20 to 0.29.....	160	1,331	7,149	1,227	2,861	6,904	30,603	38,052	4,050
0.30 to 0.39.....	119	1,624	9,046	1,358	2,799	7,307	25,075	32,314	2,477
0.40 to 0.49.....	131	1,288	8,369	1,099	2,522	5,913	16,967	23,107	2,318
0.50 to 0.59.....	71	991	5,747	841	1,738	4,676	10,552	14,497	1,237
0.60 to 0.69.....	45	543	3,235	435	939	2,664	5,091	7,852	749
0.70 to 0.79.....	27	414	2,669	330	763	2,104	3,549	5,378	554
0.80 to 0.89.....	31	426	1,841	344	541	1,510	2,160	3,258	383
0.90 to 0.99.....	14	207	839	191	364	763	887	1,494	141
1.00 and over.....	80	631	3,688	521	1,091	3,011	2,453	5,277	790
Undistributed <sup>2</sup> .....	172	50	289	42	98	260	3,474	5,737	682
Glass Sand Subindustry									
United States, total.....	39	1,570	9,140	1,223	2,738	6,650	22,648	29,099	3,998
0.10 to 0.19.....	4	71	427	64	153	380	2,487	3,092	395
0.20 to 0.29.....	7	236	1,665	199	450	1,360	6,462	8,125	1,717
0.30 to 0.39.....	7	452	2,605	363	834	1,959	6,960	8,553	696
0.40 to 0.49.....	9	381	2,132	319	721	1,701	4,487	6,012	474
0.50 to 0.59.....	3	90	364	88	187	356	641	894	133
0.60 to 0.69.....	3	83	467	59	124	237	763	1,138	75
0.80 to 0.89.....	1	257	1,480	131	269	657	848	1,285	508
0.90 to 0.99.....	2								
1.00 and over.....	2								
Undistributed <sup>2</sup> .....	1								
Middle Atlantic.....	6	423	2,625	321	736	1,952	5,326	7,039	1,223
0.20 to 0.29.....	1	308	1,926	257	588	1,555	4,741	6,095	1,082
0.40 to 0.49.....	2								
0.60 to 0.69.....	1								
0.90 to 0.99.....	1								
1.00 and over.....	1	115	699	64	148	397	585	914	141
Undistributed <sup>2</sup> .....	-								
East North Central.....	8	252	1,531	213	459	1,283	4,944	6,078	1,187
0.10 to 0.19.....	1	100	710	83	196	585	3,206	3,538	662
0.20 to 0.29.....	2								
0.30 to 0.39.....	3								
0.50 to 0.59.....	1								
0.80 to 0.89.....	1	152	821	130	263	698	1,738	2,440	525
Undistributed <sup>2</sup> .....	-								
Molding Sand Subindustry									
United States, total.....	93	927	4,992	764	1,546	3,776	12,838	16,642	904
Less than 0.10.....	3	10	29	8	15	22	402	431	3
0.10 to 0.19.....	7	36	113	35	57	110	737	800	90
0.20 to 0.29.....	13	214	1,129	193	383	993	4,436	5,262	221
0.30 to 0.39.....	20	296	1,784	263	594	1,498	4,860	6,441	354
0.40 to 0.49.....	10	80	357	75	139	342	785	1,013	60
0.50 to 0.59.....	8	74	384	62	112	324	719	912	46
0.60 to 0.69.....	5	53	249	46	106	213	391	945	82
0.70 to 0.79.....	2	98	301	82	140	274	276	454	36
0.80 to 0.89.....	1								
0.90 to 0.99.....	2								
1.00 and over.....	7								
Undistributed <sup>2</sup> .....	15	66	646	-	-	-	232	384	12
Middle Atlantic, total.....	24	411	2,224	339	628	1,698	5,676	7,126	233
Less than 0.10.....	1	12	34	12	15	34	220	245	20
0.10 to 0.19.....	2								
0.20 to 0.29.....	6								
0.30 to 0.39.....	5								
0.40 to 0.49.....	2	47	230	39	89	205	473	634	41
0.50 to 0.59.....	1								
0.90 to 0.99.....	2								
1.00 and over.....	1								
Undistributed <sup>2</sup> .....	4	83	526	42	68	160	194	321	5

See footnotes at end of table.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining, by Geographic Areas: 1963—Continued

Ratio of payroll to value added in mining and geographic area <sup>1</sup>	Establishments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expendi- tures	
		Total	Payroll	Total	Man-hours	Wages				
	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	
Molding Sand Subindustry—Continued										
East North Central, total.....	36	335	2,012	256	552	1,392	5,178	6,396	454	
Less than 0.10.....	1	}	17	57	14	38	47	608	631	50
0.10 to 0.19.....	3		58	347	50	104	275	1,423	1,725	126
0.20 to 0.29.....	3		122	868	101	280	670	2,234	2,887	236
0.30 to 0.39.....	9		34	162	31	57	150	370	451	18
0.40 to 0.49.....	6	}	31	165	27	28	137	290	342	13
0.50 to 0.59.....	4		73	413	33	55	113	253	360	11
0.60 to 0.69.....	3		}							
0.70 to 0.79.....	2									
1.00 and over.....	2									
Undistributed <sup>2</sup> .....	3									
Industrial Sand, N.E.C. Subindustry										
United States, total.....	65	1,251	7,104	1,031	2,322	5,361	18,953	24,788	1,868	
Less than 0.10.....	3	19	76	18	41	75	284	329	68	
0.10 to 0.19.....	3	63	271	57	133	230	1,569	1,827	176	
0.20 to 0.29.....	10	92	478	82	128	429	2,083	2,601	163	
0.30 to 0.39.....	12	584	3,829	474	1,126	2,825	10,390	12,893	700	
0.40 to 0.49.....	9	147	782	126	245	593	1,762	2,590	365	
0.50 to 0.59.....	8	156	710	138	285	588	1,353	1,926	120	
0.60 to 0.69.....	9	85	449	53	126	262	712	932	95	
0.70 to 0.79.....	2	}								
0.80 to 0.89.....	2		105	509	83	238	359	800	1,690	181
0.90 to 0.99.....	3									
1.00 and over.....	4									
Undistributed <sup>2</sup> .....	2									
Middle Atlantic, total.....	10	175	948	161	320	836	1,989	2,705	136	
0.20 to 0.29.....	2	}	48	244	47	93	241	658	844	35
0.30 to 0.39.....	2		31	210	26	40	166	455	578	63
0.40 to 0.49.....	3									
0.50 to 0.59.....	1		96	494	98	187	429	876	1,283	38
0.60 to 0.69.....	1	}								
0.70 to 0.79.....	1									
1.00 and over.....	1									
East North Central, total.....	13	509	3,310	396	887	2,310	9,168	11,206	694	
Less than 0.10.....	2	}	23	81	18	39	64	468	523	18
0.20 to 0.29.....	1		446	3,086	342	770	2,113	8,395	10,286	607
0.30 to 0.39.....	5		40	143	36	78	133	305	397	69
0.40 to 0.49.....	2									
0.50 to 0.59.....	1	}								
0.60 to 0.69.....	1									
Undistributed <sup>2</sup> .....	1									

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.

<sup>1</sup>In computing these ratios contract employment serving the establishment is excluded. The cost of contract work expressed as a percent of payroll for 1963 was: For the Construction Sand and Gravel Subindustry, 11 percent; for the Glass Sand Subindustry, 4 percent; for the Molding Sand Subindustry, 10 percent; and for the Industrial Sand, N.E.C. Subindustry, 4 percent.

<sup>2</sup>Represents establishments with no employees; with zero or negative value added in mining; and, except for statistics by type of operation, figures for separately reported central offices and related facilities.

<sup>3</sup>Not shown since the cost of supplies, minerals received for preparation, fuels, purchased electric energy, contract work, and purchased machinery installed exceeded value of shipments and receipts plus capital expenditures.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment, by Selected Types of Operation: 1963

Type of operation, and value added per employee class <sup>1</sup>	Number of employees	Number of establishments with average employment of--					
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees
Construction Sand and Gravel Subindustry							
All establishments, total.....	36,394	4,419	3,983	359	63	14	-
Less than \$3,000.....	2,368	382	361	19	1	1	-
\$3,000 to \$3,999.....	1,082	170	163	4	3	-	-
\$4,000 to \$4,999.....	1,733	196	175	19	1	1	-
\$5,000 to \$5,999.....	1,512	223	210	11	2	-	-
\$6,000 to \$6,999.....	1,284	187	171	16	-	-	-
\$7,000 to \$7,999.....	1,787	190	164	22	3	1	-
\$8,000 to \$8,999.....	3,054	286	234	47	5	-	-
\$9,000 to \$9,999.....	2,611	221	192	23	3	3	-
\$10,000 to \$12,499.....	4,741	444	381	46	15	2	-
\$12,500 to \$14,999.....	3,982	331	270	45	15	1	-
\$15,000 to \$17,499.....	2,368	216	186	27	1	2	-
\$17,500 to \$19,999.....	1,647	156	134	17	5	-	-
\$20,000 and over.....	5,247	561	491	59	8	3	-
Undistributed <sup>2</sup> .....	2,978	856	851	4	1	-	-
Selected types of operation for producing establishments:							
Bank, mining only, total.....	845	308	302	6	-	-	-
Less than \$3,000.....	130	34	33	1	-	-	-
\$3,000 to \$3,999.....	34	14	14	-	-	-	-
\$4,000 to \$4,999.....	40	10	10	-	-	-	-
\$5,000 to \$5,999.....	15	7	7	-	-	-	-
\$6,000 to \$6,999.....	33	9	9	-	-	-	-
\$7,000 to \$7,999.....	53	12	11	1	-	-	-
\$8,000 to \$8,999.....	179	18	14	4	-	-	-
\$9,000 to \$9,999.....	24	9	9	-	-	-	-
\$10,000 to \$12,499.....	37	12	12	-	-	-	-
\$12,500 to \$14,999.....	17	5	5	-	-	-	-
\$15,000 to \$17,499.....	14	8	8	-	-	-	-
\$17,500 to \$19,999.....	18	6	6	-	-	-	-
\$20,000 and over.....	66	28	28	-	-	-	-
Undistributed <sup>2</sup> .....	185	136	136	-	-	-	-
Bank, mining with preparation, excluding screening or crushing only, total.....	2,973	314	288	24	1	1	-
Less than \$3,000.....	73	12	11	1	-	-	-
\$3,000 to \$3,999.....	120	11	10	1	-	-	-
\$4,000 to \$4,999.....	126	18	17	1	-	-	-
\$5,000 to \$5,999.....	133	16	15	1	-	-	-
\$6,000 to \$6,999.....	133	18	17	1	-	-	-
\$7,000 to \$7,999.....	125	14	12	2	-	-	-
\$8,000 to \$8,999.....	119	18	18	-	-	-	-
\$9,000 to \$9,999.....	301	16	13	2	-	1	-
\$10,000 to \$12,499.....	233	35	34	1	-	-	-
\$12,500 to \$14,999.....	435	36	29	6	1	-	-
\$15,000 to \$17,499.....	115	15	14	1	-	-	-
\$17,500 to \$19,999.....	186	15	13	2	-	-	-
\$20,000 and over.....	480	44	40	4	-	-	-
Undistributed <sup>2</sup> .....	394	46	45	1	-	-	-
Bank and wet pit, total.....	2,364	213	187	21	5	-	-
Less than \$3,000.....	49	4	3	1	-	-	-
\$3,000 to \$3,999.....	18	4	4	-	-	-	-
\$4,000 to \$4,999.....	93	8	6	3	-	-	-
\$5,000 to \$5,999.....	23	2	2	-	-	-	-
\$6,000 to \$6,999.....	5	5	5	-	-	-	-
\$7,000 to \$7,999.....	216	13	8	4	1	-	-
\$8,000 to \$8,999.....	63	7	7	-	-	-	-
\$9,000 to \$9,999.....	47	4	4	-	-	-	-
\$10,000 to \$12,499.....	312	20	14	5	1	-	-
\$12,500 to \$14,999.....	265	17	12	3	2	-	-
\$15,000 to \$17,499.....	274	20	15	5	-	-	-
\$17,500 to \$19,999.....	103	5	4	-	1	-	-
\$20,000 and over.....	119	15	14	1	-	-	-
Undistributed <sup>2</sup> .....	782	89	89	-	-	-	-
Bank and dry pit, total.....	2,883	244	213	28	3	-	-
Less than \$3,000.....	65	4	3	1	-	-	-
\$3,000 to \$3,999.....	62	6	6	-	-	-	-
\$4,000 to \$4,999.....	63	1	1	-	-	-	-
\$5,000 to \$5,999.....	4	4	3	1	-	-	-
\$6,000 to \$6,999.....	45	3	2	1	-	-	-
\$7,000 to \$7,999.....	30	5	5	-	-	-	-
\$8,000 to \$8,999.....	113	8	5	3	-	-	-
\$9,000 to \$9,999.....	98	8	7	1	-	-	-
\$10,000 to \$12,499.....	206	18	15	3	-	-	-
\$12,500 to \$14,999.....	164	12	10	2	-	-	-
\$15,000 to \$17,499.....	322	14	8	5	1	-	-
\$17,500 to \$19,999.....	120	6	4	1	1	-	-
\$20,000 and over.....	587	42	31	10	1	-	-
Undistributed <sup>2</sup> .....	1,008	113	113	-	-	-	-

See footnotes at end of table.



TABLE 10. Value Added in Mining Per Employee, by Size of Establishment, by Selected Types of Operation: 1963—Continued

Type of operation, and value added per employee class <sup>1</sup>	Number of employees	Number of establishments with average employment of--				
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees
Construction Sand and Gravel Subindustry—Continued						
Selected types of operation for producing establishments—Con.						
Wet pit, mining only, total.....	252	64	63	1	-	-
Less than \$3,999.....	16	4	4	-	-	-
\$5,000 to \$7,999.....	33	4	4	-	-	-
\$8,000 to \$9,999.....	47	5	5	-	-	-
\$10,000 to \$12,499.....	51	4	3	1	-	-
\$12,500 to \$14,999.....	13	3	3	-	-	-
\$15,000 to \$17,499.....	17	5	5	-	-	-
\$17,500 to \$19,999.....	26	7	7	-	-	-
\$20,000 and over.....	49	22	22	-	-	-
Undistributed <sup>2</sup> .....	-	10	10	-	-	-
Wet pit, mining with preparation, excluding crushing or screening only, total.....	6,337	727	647	64	12	4
Less than \$3,000.....	327	44	41	2	1	-
\$3,000 to \$3,999.....	158	23	22	1	-	-
\$4,000 to \$4,999.....	236	27	23	4	-	-
\$5,000 to \$5,999.....	265	30	29	-	1	-
\$6,000 to \$6,999.....	183	29	27	2	-	-
\$7,000 to \$7,999.....	291	35	32	3	-	-
\$8,000 to \$8,999.....	308	31	25	5	1	-
\$9,000 to \$9,999.....	304	25	20	5	-	-
\$10,000 to \$12,499.....	840	84	72	9	3	-
\$12,500 to \$14,999.....	876	69	52	14	3	-
\$15,000 to \$17,499.....	527	34	29	3	-	2
\$17,500 to \$19,999.....	388	35	29	6	-	-
\$20,000 and over.....	1,140	106	92	9	3	2
Undistributed <sup>2</sup> .....	494	155	154	1	-	-
Dry pit, mining only, total.....	900	307	299	8	-	-
Less than \$3,000.....	155	42	42	-	-	-
\$3,000 to \$3,999.....	57	23	23	-	-	-
\$4,000 to \$4,999.....	44	23	23	-	-	-
\$5,000 to \$5,999.....	60	18	17	1	-	-
\$6,000 to \$6,999.....	55	11	10	1	-	-
\$7,000 to \$7,999.....	57	8	6	2	-	-
\$8,000 to \$8,999.....	147	16	13	3	-	-
\$9,000 to \$9,999.....	104	17	17	-	-	-
\$10,000 to \$12,499.....	97	25	24	1	-	-
\$12,500 to \$14,999.....	46	12	12	-	-	-
\$15,000 to \$17,499.....	14	8	8	-	-	-
\$17,500 to \$19,999.....	7	3	3	-	-	-
\$20,000 and over.....	55	19	19	-	-	-
Undistributed <sup>2</sup> .....	(2)	82	82	-	-	-
Dry pit, mining with preparation, excluding screening or crushing only, total.....	8,093	933	828	88	13	4
Less than \$3,000.....	413	55	49	6	-	-
\$3,000 to \$3,999.....	170	24	23	-	1	-
\$4,000 to \$4,999.....	569	39	32	6	-	1
\$5,000 to \$5,999.....	359	46	42	4	-	-
\$6,000 to \$6,999.....	250	37	34	3	-	-
\$7,000 to \$7,999.....	293	36	33	2	1	-
\$8,000 to \$8,999.....	246	37	35	2	-	-
\$9,000 to \$9,999.....	562	44	36	6	1	1
\$10,000 to \$12,499.....	1,121	84	68	12	3	1
\$12,500 to \$14,999.....	1,125	65	46	14	4	1
\$15,000 to \$17,499.....	625	54	47	7	-	-
\$17,500 to \$19,999.....	327	33	30	2	1	-
\$20,000 and over.....	1,385	127	101	24	2	-
Undistributed <sup>2</sup> .....	648	252	252	-	-	-
Glass Sand Subindustry						
All establishments, total.....	1,570	39	17	15	5	1
Less than \$3,000.....	123	2	1	-	1	-
\$3,000 to \$3,999.....		1	-	-	1	-
\$4,000 to \$4,999.....		1	1	-	-	-
\$5,000 to \$5,999.....	80	1	-	1	-	-
\$6,000 to \$6,999.....		2	1	1	-	-
\$7,000 to \$7,999.....		69	3	1	2	-
\$8,000 to \$8,999.....	87	2	1	1	-	-
\$9,000 to \$9,999.....		1	-	1	-	-
\$10,000 to \$12,499.....		353	8	4	3	1
\$12,500 to \$14,999.....	375	2	1	1	-	-
\$15,000 to \$17,499.....		2	-	1	-	1
\$17,500 to \$19,999.....		82	3	2	-	-
\$20,000 and over.....	401	10	4	4	2	-
Undistributed <sup>2</sup> .....		1	1	-	-	-

See footnotes at end of table.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment, by Selected Types of Operation: 1963—Continued

Type of operation, and value added per employee class <sup>1</sup>	Number of employees	Number of establishments with average employment of--					
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees
		Molding Sand Subindustry					
All establishments, total.....	927	93	82	9	2	-	-
Less than \$3,000.....	62	8	8	-	-	-	-
\$3,000 to \$3,999.....	5	3	3	-	-	-	-
\$4,000 to \$4,999.....	44	5	4	1	-	-	-
\$5,000 to \$5,999.....	20	6	6	-	-	-	-
\$6,000 to \$6,999.....	17	4	4	-	-	-	-
\$7,000 to \$7,999.....	19	4	4	-	-	-	-
\$8,000 to \$8,999.....	61	6	5	1	-	-	-
\$9,000 to \$9,999.....	58	4	4	-	-	-	-
\$10,000 to \$12,499.....	64	6	5	1	-	-	-
\$12,500 to \$14,999.....	55	4	3	1	-	-	-
\$15,000 to \$17,499.....	231	15	11	3	1	-	-
\$17,500 to \$19,999.....		2	2	-	-	-	-
\$20,000 and over.....		225	12	9	2	1	-
Undistributed <sup>2</sup> .....	91	14	14	-	-	-	-
		Industrial Sand, N.E.C., Subindustry					
All establishments, total.....	1,251	65	49	11	3	1	1
Less than \$3,000.....	11	2	2	-	-	-	-
\$3,000 to \$3,999.....		2	2	-	-	-	-
\$4,000 to \$4,999.....		61	6	5	1	-	-
\$5,000 to \$5,999.....	44	3	2	1	-	-	-
\$6,000 to \$6,999.....	67	4	3	-	1	-	-
\$7,000 to \$7,999.....	54	2	1	1	-	-	-
\$8,000 to \$8,999.....		3	3	-	-	-	-
\$9,000 to \$9,999.....		16	3	3	-	-	-
\$10,000 to \$12,499.....	162	8	5	2	1	-	-
\$12,500 to \$14,999.....	229	9	4	5	-	-	-
\$15,000 to \$17,499.....	37	6	6	-	-	-	-
\$17,500 to \$19,999.....	323	4	3	-	-	-	1
\$20,000 and over.....	247	11	8	1	1	1	-
Undistributed <sup>2</sup> .....		2	2	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.

<sup>1</sup>In computing these ratios contract employment serving the establishment is excluded. The cost of contract work expressed as a percent of payroll for 1963 was: For the Construction Sand and Gravel Subindustry, 11 percent; for the Glass Sand Subindustry, 4 percent; for the Molding Sand Subindustry, 10 percent; and for the Industrial Sand, N.E.C., Subindustry, 4 percent.

<sup>2</sup>Represents establishments with no employees or with negative value added in mining and, except for statistics by type of operation, figures for separately reported central offices and related facilities.

TABLE 11. Hourly Earnings of Production, Development, and Exploration Workers for Establishments with 10 or More Employees, by Geographic Areas: 1963

Subindustry by hourly earnings classes	Number of employees <sup>1</sup>	Number of establishments with 10 or more employees in--								
		Total	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Pacific
Construction sand and gravel subindustry, total.....	25,919	1,102	69	107	237	122	108	70	138	174
Less than \$1.00.....	597	41	2	1	4	6	4	6	9	3
\$1.00 to \$1.49.....	1,756	81	2	3	7	8	14	15	28	4
\$1.50 to \$1.99.....	6,034	243	9	24	35	30	44	24	57	14
\$2.00 to \$2.49.....	4,655	204	13	17	47	38	16	17	25	21
\$2.50 to \$2.99.....	5,576	229	25	27	67	22	16	4	11	25
\$3.00 to \$3.49.....	2,708	127	10	15	35	7	8	-	2	35
\$3.50 to \$3.99.....	2,012	65	2	5	13	4	5	-	1	33
\$4.00 to \$4.49.....	1,113	46	2	5	14	1	1	1	1	21
\$4.50 and over.....	1,349	58	5	10	14	4	1	2	4	16
No production or development workers.....	119	8	-	2	1	2	-	1	-	2
Glass sand subindustry, total.....	1,448	33	-	5	8	2	8	2	3	4
\$1.00 to \$1.49.....	63	4	-	-	1	-	2	-	1	-
\$1.50 to \$1.99.....	242	7	-	-	1	-	3	2	1	-
\$2.00 to \$2.49.....	465	9	-	1	1	2	3	-	1	1
\$2.50 to \$2.99.....	523	8	-	4	3	-	-	-	-	-
\$3.00 to \$3.49.....	3	3	-	-	1	-	-	-	-	2
\$3.50 to \$3.99.....	155	1	-	-	-	-	-	-	-	1
\$4.00 to \$4.49.....	1	1	-	-	1	-	-	-	-	-
Molding sand subindustry, total.....	655	25	-	8	11	1	-	2	3	-
Less than \$1.00.....	127	1	-	-	-	-	-	-	1	-
\$1.50 to \$1.99.....	85	6	-	1	1	1	-	2	1	-
\$2.00 to \$2.49.....	5	5	-	-	5	-	-	-	-	-
\$2.50 to \$2.99.....	443	11	-	6	4	-	-	-	1	-
\$3.50 to \$3.99.....	1	1	-	1	-	-	-	-	-	-
\$4.50 and over.....	1	1	-	-	1	-	-	-	-	-
Industrial sand, n.e.c., sub-industry, total.....	1,149	33	2	5	7	4	4	2	6	2
\$1.00 to \$1.49.....	136	4	-	-	-	-	3	-	1	-
\$1.50 to \$1.99.....	201	10	1	1	3	-	-	2	3	-
\$2.00 to \$2.49.....	234	9	1	2	-	2	1	-	2	1
\$2.50 to \$2.99.....	495	6	-	1	4	-	-	-	-	1
\$3.50 to \$3.99.....	1	1	-	-	-	-	-	-	-	1
\$4.00 to \$4.49.....	83	1	-	-	-	1	-	-	-	-
\$4.50 and over.....	2	2	-	1	-	1	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.

<sup>1</sup>Excludes figures for separately reported central offices and related facilities.

TABLE 12. Distribution of Operating Companies, by Employment Size and by Number of Establishments: 1963

Subindustry by hourly earnings classes	Number of--		Number of establishments with average employment of--									
	Operating companies	Employees <sup>1</sup>	Total	0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
Construction Sand and Gravel Subindustry												
TOTAL.....	4,001	35,479	4,419	2,478	843	636	383	63	16	-	-	-
Multiunit companies, total.....	396	13,904	814	217	155	213	184	33	12	-	-	-
1 establishment <sup>2</sup> .....	251	4,819	251	47	60	85	55	8	6	-	-	-
2 establishments.....	70	2,150	144	41	33	34	30	6	-	-	-	-
3 or 4 establishments.....	40	2,134	131	46	17	33	20	3	3	-	-	-
5 or 6 establishments.....	16	1,254	84	24	12	27	18	3	-	-	-	-
7 to 9 establishments.....	9	1,407	69	20	8	9	26	5	1	-	-	-
10 to 14 establishments.....	7	1,069	75	21	16	23	9	6	-	-	-	-
15 to 19 establishments.....	1	1,071	16	2	2	6	-	-	-	-	-	-
20 or more establishments.....	2		44	16	7	6	11	2	2	-	-	-
Single unit companies.....	3,605	21,575	3,605	2,261	688	423	199	30	4	-	-	-
Glass Sand Subindustry												
TOTAL.....	32	1,475	39	1	4	11	16	5	1	1	-	-
Multiunit companies, total.....	13	1,099	20	-	1	5	8	4	1	1	-	-
1 establishment <sup>2</sup> .....	10	325	10	-	1	2	4	3	-	-	-	-
2 establishments.....	1	774	2	-	-	1	1	-	-	-	-	-
3 or 4 establishments.....	1		3	-	-	1	2	-	-	-	-	-
5 or 6 establishments.....	1		5	-	-	1	1	1	1	1	-	-
Single unit companies.....	19	376	19	1	3	6	8	1	-	-	-	-
Molding Sand Subindustry												
TOTAL.....	68	861	93	52	16	14	9	2	-	-	-	-
Multiunit companies, total.....	18	505	43	17	9	9	8	-	-	-	-	-
1 establishment <sup>2</sup> .....	8	125	8	1	2	3	2	-	-	-	-	-
2 establishments.....	5	108	10	5	-	4	1	-	-	-	-	-
3 or 4 establishments.....	4	272	12	2	5	2	3	-	-	-	-	-
10 to 14 establishments.....	1		13	9	2	-	2	-	-	-	-	-
Single unit companies.....	50	356	50	35	7	5	1	2	-	-	-	-
Industrial Sand, N.E.C.												
TOTAL.....	59	1,251	65	23	9	17	11	3	1	1	-	-
Multiunit companies, total.....	15	807	21	3	3	5	6	2	1	1	-	-
1 establishment <sup>2</sup> .....	13	807	13	3	3	3	3	-	1	-	-	-
2 establishments.....	1		2	-	-	-	1	-	-	1	-	-
5 or 6 establishments.....	1		6	-	-	2	2	2	-	-	-	-
Single unit companies.....	44	444	44	20	6	12	5	1	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.

<sup>1</sup>Excludes figures for separately reported central offices and related facilities.

<sup>2</sup>Represents companies having at least one establishment classified in other industries or subindustries.



## CLAY, CERAMIC, AND REFRACTORY MINERALS

This report shows 1963 Census of Mineral Industries statistics for establishments classified in Industry Group 145, Clay, Ceramic, and Refractory Minerals. Mines operated in conjunction with cement, brick, other structural clay products, and pottery and related products plants are included in these industries when separate reports are available. Establishments primarily engaged in grinding, pulverizing, or otherwise treating clay and ceramic and refractory minerals not in conjunction with mining operations are classified in industry 3295, Minerals, Ground or Treated. The separate industries included in this group are as follows:

### SIC Code and Title

- 1452—Bentonite
- 1453—Fire Clay
- 1454—Fuller's Earth
- 1455—Kaolin and Ball Clay
- 1456—Feldspar
- 1459—Clay, Ceramic, and Refractory Minerals, Not Elsewhere Classified

### INDUSTRY DESCRIPTIONS

Industry 1452—Bentonite. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing bentonite. Establishments engaged in preparing bentonite which do not include a mine are classified in the manufacturing industry 3295, Minerals, Ground or Treated. Such establishments produced less than 10 percent of all prepared bentonite in 1963.

Industry 1453—Fire Clay. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing fire clay, including stoneware clay and diaspore. For mines producing fire clay as the principal product as part of an establishment manufacturing cement or clay, refractory, or pottery products, the entire establishment is classified in manufacturing. Such establishments mined over one-half of all fire clay in 1963. These operations were included in the following manufacturing industries: 3241, Cement, Hydraulic; 3251, Brick and Structural Tile; 3255, Clay Refractories; and 3259, Structural Clay Products, N.E.C.

Industry 1454—Fuller's Earth. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing fuller's earth.

Industry 1455—Kaolin and Ball Clay. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing kaolin or ball clay, including china clay, paper clay, and slip clay.

Industry 1456—Feldspar. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing feldspar. Establishments engaged in grinding feldspar which do not include a mine are classified in the manufacturing industry 3295, Minerals, Ground or Treated. Such establishments produced about 5 percent of all ground feldspar in 1963.

Industry 1459—Clay, Ceramic, and Refractory Minerals, Not Elsewhere Classified. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing clay, ceramic, or refractory minerals, not elsewhere classified, such as common clay and shale, andalusite, aplite, brucite, dumortierite, kyanite, laterite, magnesite, olivine, pinite, sillimanite, and topaz (nongem). Establishments producing common clay and shale in conjunction with the manufacture of structural clay products are classified in Major Group 32, Stone, Clay, and Glass Products. In 1963, such combination mining and manufacturing establishments were included in the following manufacturing industries: 3241, Cement, Hydraulic; 3251, Brick and Structural Tile; 3253, Ceramic Wall and Floor Tile; 3255, Clay Refractories; and 3259, Structural Clay Products, N.E.C. Nearly 80 percent of all common clay and shale produced in 1963 was mined at such manufacturing establishments.

Selected statistics for fire clay and common clay and shale mines included in manufacturing establishments are shown in tables 1, 2, and 6A of this report.

#### SUMMARY OF FINDINGS

The total value of shipments and receipts of the clay and related minerals industries in 1963 was \$161.6 million of which primary products of these industries amounted to \$156.6 million and secondary products, receipts for services, and products purchased for resale without further processing amounted to \$5.0 million. Of the total value of shipments for this group, the Bentonite Industry accounted for \$18.1 million; the Fire Clay Industry, \$17.1 million; the Fuller's Earth Industry, \$13.0 million; the Kaolin and Ball Clay Industry, \$66.1 million; the Feldspar Industry, \$8.5 million; and the Clay and Related Minerals, N.E.C., Industry \$38.9 million. These figures represent gross value of shipments and some of them contain duplication due to the inclusion of the value of minerals transferred from one establishment to other establishments in the same industry for preparation. However, for the group as a whole, the cost of minerals received for preparation amounted to only \$0.4 million, or less than one percent of the total value of shipments and receipts of all industries in this group. For the Fuller's Earth Industry, no receipts of minerals for preparation were reported. For all other industries in this group the cost of minerals received for preparation amounted to less than one percent of the industry total value of shipments and receipts.

The production index for the primary products of the Clay and Related Minerals Industries increased to 134 in 1963 from the 1958 level of 110. The unit value index for 1963 was 112 compared to 114 in 1958. Both indexes were computed on a basis of 1954 = 100. For bentonite the production index for 1963 was 136, compared to 118 for 1958; for fire clay, 91 for 1963 and 92 for 1958; for fuller's earth, 149 for 1963 and 92 for 1958; for kaolin and ball clay, 173 for 1963 and 124 for 1958; for feldspar, 127 for 1963 and 107 for 1958; and for clay and related minerals, n.e.c., 136 for 1963 and 114 for 1958.

The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their activities in the production of secondary products, and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7 to 12) with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5 which shows the value of primary and secondary products shipped by establishments classified in the specified industry and also the value of net shipments of primary products of the industry produced in the industry and as secondary products by establishments classified in other industries.

## COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the Clay, Ceramic, and Refractory Minerals Industries are, in general, comparable with product statistics for the same commodities published by the Bureau of Mines. The differences which occur result primarily from differences in data collection methods, coverage, and objectives sought. The most nearly comparable statistics from the two bureaus are shown in the table below. Major reasons for the differences in the product statistics are:

1. The Bureau of the Census collects information on production and shipments and calculates net shipments whereas the Bureau of Mines generally obtains figures on products sold or used. Both Census and Mines figures for fire clay and common clay and shale include production for use at the same establishment in manufacturing cement, clay products, and pottery products.
2. The Bureau of the Census excludes establishments whose value of products and reported costs were below \$500. The Bureau of Mines includes all reports obtained regardless of size. However, the contribution to products of such small operations is usually very small.
3. Differences exist in coverage in certain areas for both collecting agencies.
4. In some cases, a respondent may report his product as one type of clay to the Bureau of the Census and as another type of clay to the Bureau of Mines. This accounts for some of the differences between Census and Bureau of Mines figures for bentonite and fuller's earth.
5. Census figures are sometimes reported at a different level of preparation than the Bureau of Mines figures. In general, Census uses a uniform approach to crude and prepared material, requesting for crude the total material actually loaded at the mine site, and under prepared material, the product of all preparation methods such as drying and pulverizing.



## 1963 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Bureau of the Census statistics			Bureau of Mines statistics		
	Production (1,000 short tons)	Shipments including interplant transfers		Production (1,000 short tons)	Shipments	
		Quantity (1,000 short tons)	Value (\$1,000)		Quantity (1,000 short tons)	Value (\$1,000)
Bentonite:						
Crude bentonite...	<sup>1</sup> 2,115	<sup>2</sup> 241	<sup>2</sup> 1,207	(NA)	(NA)	(NA)
Net shipments by the mineral industries.....	(X)	1,645	17,217	<sup>3</sup> 1,585	(NA)	<sup>3</sup> 18,536
Fire clay:						
Crude fire clay...	<sup>4</sup> 8,430	3,178	13,684	} <sup>3</sup> 8,390	(NA)	<sup>3</sup> 39,558
Prepared fire clay	(NA)	1,069	5,817			
Fuller's earth:						
Net shipments.....	(X)	462	10,094	<sup>3</sup> 482	(NA)	<sup>3</sup> 11,211
Kaolin and ball clay:						
Crude kaolin and ball clay.....	<sup>1</sup> 5,254	<sup>2</sup> 331	<sup>2</sup> 2,373	} <sup>3</sup> 3,712	(NA)	<sup>3</sup> 67,311
Prepared kaolin and ball clay....	(NA)	3,269	64,913			
Feldspar:						
Crude feldspar....	1,052	25	130	<sup>3</sup> 615	(NA)	<sup>3</sup> 5,524
Prepared feldspar.	(NA)	593	8,130	(NA)	599	7,353
Common clay and shale:						
Crude common clay and shale.....	<sup>4</sup> 37,101	2,329	3,650	} <sup>3</sup> 35,968	(NA)	<sup>3</sup> 44,194
Prepared common clay and shale...	(NA)	4,661	26,632			
Aplite and kyanite....	(NA)	204	4,021	} <sup>3</sup> 739	(NA)	<sup>3</sup> 6,220
Magnesite and olivine.	(NA)	198	8,694			

(NA) Not available. (X) Not applicable.

<sup>1</sup>Represents quantity mined and prepared at same establishment plus quantity of crude net shipments.

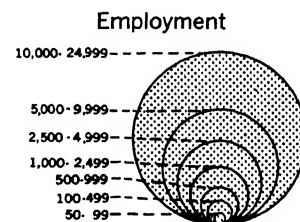
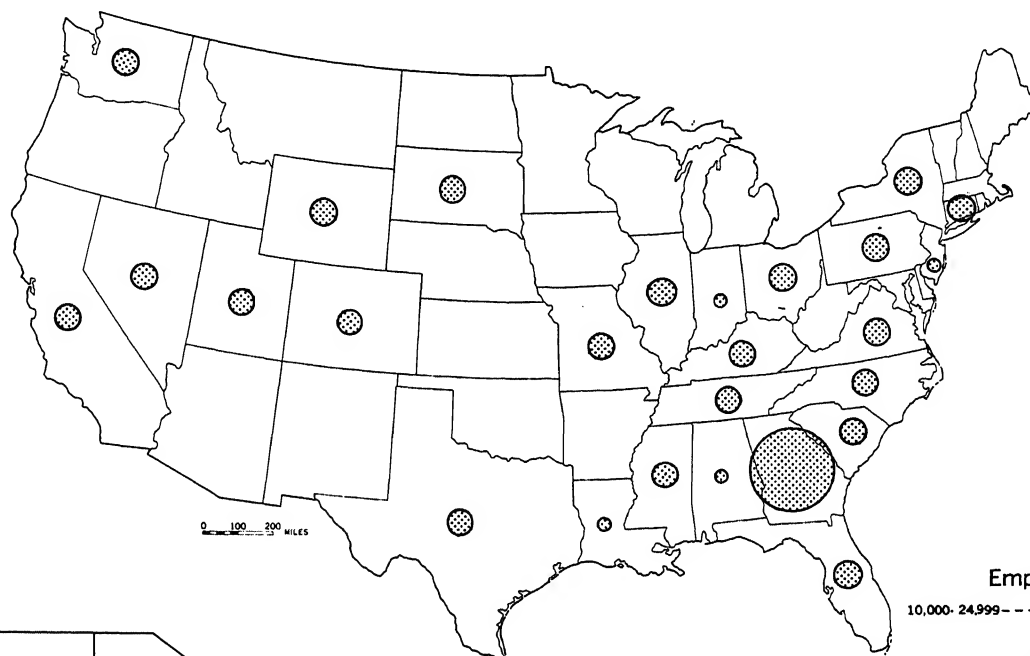
<sup>2</sup>Represents net shipments.

<sup>3</sup>Represents sold or used by producers.

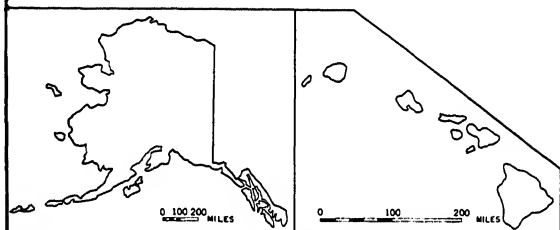
<sup>4</sup>Represents quantity mined and used at the same establishment in making cement, clay products, and prepared clay plus quantity of crude clay shipped.

# CLAY AND RELATED MINERALS

Distribution of Employment by State: 1963



No circle is shown for States with fewer than 50 employees.



## Employment and production, including mining in manufactures: 1840-1963

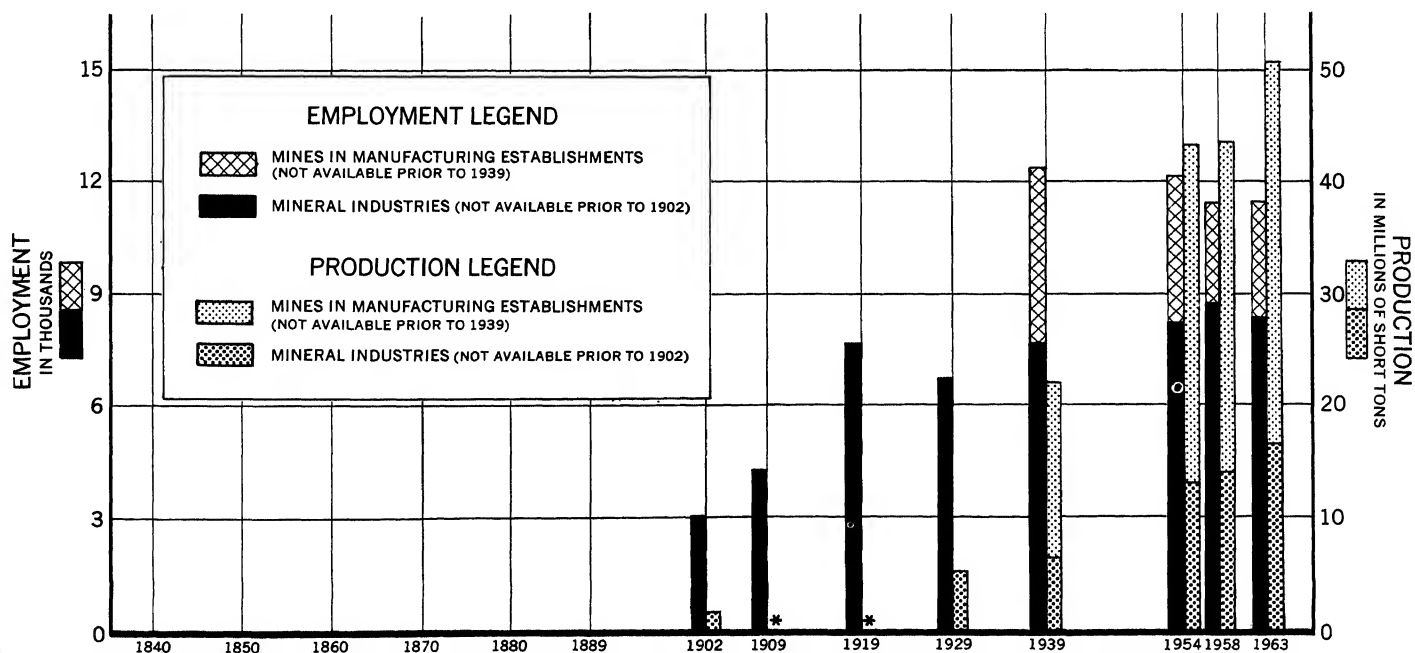


TABLE 1. General Statistics: 1963 and Earlier Years

Industry and year	Operating com- panies  (number)	Establishments		All employees		Production, development, and exploration workers			Value added in mining  (\$1,000)	Cost of sup- plies, minerals received for preparation, fuels, pur- chased electric energy, and contract work  (\$1,000)	Cost of purchased machin- ery in- stalled  (\$1,000)	Value of shipments and receipts  (\$1,000)	Value of net ship- ments and receipts <sup>1</sup>  (\$1,000)	Quantity of primary products  (1,000 short tons)	Capital expen- ditures  (\$1,000)	Horse- power rating of power equip- ment  (1,000)
		Total  (number)	With 20 employ- ees or more  (number)	Total  (number)	Payroll  (\$1,000)	Total  (number)	Man-hours  (1,000)	Wages  (\$1,000)								
GROUP 145.—CLAY AND RELATED MINERALS AND SIMILAR MINES IN MANUFACTURES																
1963, total.....	825	1,080	136	11,432	55,913	10,263	21,277	47,857	160,006	64,949	(NA)	221,417	218,934	50,541	(NA)	(NA)
Mines and plants in min- eral industries.....	349	423	111	8,316	42,171	7,147	15,061	34,115	113,585	51,597	11,081	161,644	159,161	16,458	14,619	512
Mines in manufacturing establishments.....	496	657	25	<sup>2</sup> 3,116	<sup>2</sup> 13,742	<sup>2</sup> 3,116	6,216	13,742	46,421	13,352	(NA)	<sup>3</sup> 59,773	<sup>3</sup> 59,773	34,083	(NA)	(NA)
1958, total.....	888	1,202	129	11,347	46,828	9,872	20,044	37,551	128,954	48,496	(NA)	173,597	172,551	43,513	(NA)	(NA)
Mines and plants in min- eral industries.....	<sup>4</sup> 396	490	112	8,773	36,157	7,298	14,897	26,880	87,368	39,223	9,344	122,738	121,692	13,834	13,197	(NA)
Mines in manufacturing establishments.....	520	712	17	<sup>2</sup> 2,574	<sup>2</sup> 10,671	<sup>2</sup> 2,574	5,147	10,671	41,586	9,273	(NA)	<sup>3</sup> 50,859	<sup>3</sup> 50,859	29,679	(NA)	(NA)
1954, total.....	(NA)	1,363	(NA)	12,065	38,738	11,296	23,043	34,724	106,141	36,860	(NA)	140,447	139,142	43,290	(NA)	(NA)
Mines and plants in min- eral industries.....	475	632	111	8,232	26,504	7,463	15,377	22,490	78,449	27,873	6,508	103,768	102,463	13,143	9,062	361
Mines in manufacturing establishments.....	(NA)	731	(NA)	<sup>2</sup> 3,833	<sup>2</sup> 12,234	<sup>2</sup> 3,833	7,666	12,234	27,692	8,987	(NA)	<sup>3</sup> 36,679	<sup>3</sup> 36,679	30,147	(NA)	(NA)
1939, total.....	890	<sup>5</sup> 1,132	(NA)	12,301	11,330	11,459	20,466	9,487	21,742	<sup>6</sup> 5,622	(NA)	(NA)	27,364	21,984	(NA)	(NA)
Mines and plants in min- eral industries.....	(NA)	<sup>5</sup> 454	(NA)	7,936	6,992	7,233	(NA)	5,430	14,425	<sup>6</sup> 3,952	(NA)	(NA)	18,377	(NA)	(NA)	157
Mines in manufacturing establishments.....	<sup>4</sup> 556	<sup>5</sup> 678	(NA)	4,365	4,338	4,226	(NA)	4,057	7,317	<sup>6</sup> 1,670	(NA)	(NA)	8,987	(NA)	(NA)	(NA)
Mines and plants classified in mineral industries:																
1929.....	(NA)	277	(NA)	6,669	7,039	6,079	(NA)	5,604	15,105	<sup>6</sup> 4,439	629	(NA)	19,544	5,008	(NA)	50
1919.....	(NA)	395	(NA)	7,637	7,908	7,074	(NA)	6,824	11,362	3,465	(NA)	14,827	14,796	(NA)	(NA)	28
1909 <sup>7</sup> .....	<sup>4</sup> 313	313	(NA)	4,205	1,923	3,901	(NA)	1,623	2,999	602	(NA)	3,601	3,601	(NA)	(NA)	12
1902.....	<sup>4</sup> 234	<sup>5</sup> 236	(NA)	3,025	1,281	<sup>8</sup> 2,799	(NA)	1,100	2,060	<sup>6</sup> 369	(NA)	(NA)	2,429	1,467	(NA)	(NA)
Industry 1452.—Bentonite																
1963.....	31	44	16	811	4,127	644	1,508	3,141	11,435	6,892	1,134	18,105	(D)	1,629	1,356	42
1958.....	29	41	15	688	2,885	543	1,140	1,996	12,220	4,697	1,009	16,843	(D)	<sup>9</sup> 1,558	1,083	(NA)
1954.....	29	43	16	634	2,135	578	1,340	1,920	16,350	<sup>5</sup> 5,518	604	21,830	(D)	1,472	642	36
1939 <sup>10</sup> .....	27	<sup>2</sup> 29	(NA)	419	446	357	687	309	1,463	<sup>8</sup> 519	(NA)	(NA)	1,982	223	(NA)	7
Industry 1453.—Fire Clay and Fire Clay Mines in Manufactures																
1963, total.....	228	293	29	2,175	10,240	2,057	4,041	9,427	30,596	10,099	(NA)	40,540	40,333	8,245	(NA)	(NA)
Fire clay industry.....	134	155	14	979	4,608	861	1,640	3,795	12,640	4,620	2,004	17,105	16,898	3,552	2,159	86
Fire clay mines in manu- factures.....	101	138	15	<sup>2</sup> 1,196	<sup>2</sup> 5,632	<sup>2</sup> 1,196	2,401	5,632	17,956	5,479	(NA)	<sup>3</sup> 23,435	<sup>3</sup> 23,435	4,693	(NA)	(NA)
1958, total.....	235	317	28	2,278	9,637	2,084	3,824	8,606	25,848	7,508	(NA)	32,944	32,759	8,447	(NA)	(NA)
Fire clay industry.....	134	182	19	1,473	6,020	1,279	2,214	4,989	14,540	4,478	1,695	18,606	18,421	4,000	2,107	(NA)
Fire clay mines in manu- factures <sup>13</sup> .....	104	135	9	<sup>2</sup> 805	<sup>2</sup> 3,617	<sup>2</sup> 805	1,610	3,617	11,308	3,030	(NA)	<sup>3</sup> 14,338	<sup>3</sup> 14,338	4,447	(NA)	(NA)
1954, total.....	279	353	(NA)	3,196	10,711	3,011	5,542	9,783	24,335	7,519	(NA)	31,819	31,659	8,394	(NA)	(NA)
Fire clay industry.....	180	248	29	1,987	6,598	1,802	3,123	5,670	17,468	4,773	1,292	22,206	22,046	4,405	1,327	100
Fire clay mines in manu- factures.....	(NA)	<sup>5</sup> 105	(NA)	<sup>2</sup> 1,209	<sup>2</sup> 4,113	<sup>2</sup> 1,209	2,419	4,113	6,867	2,746	(NA)	<sup>3</sup> 9,613	<sup>3</sup> 9,613	3,989	(NA)	(NA)
1939, total <sup>11</sup> .....	200	<sup>5</sup> 306	(NA)	3,910	3,865	3,655	5,642	3,366	6,168	<sup>6</sup> 1,010	(NA)	(NA)	7,178	4,101	(NA)	(NA)
Fire clay industry.....	(NA)	<sup>5</sup> 196	(NA)	2,317	2,144	2,135	(NA)	1,817	3,411	<sup>6</sup> 678	(NA)	(NA)	4,089	(NA)	(NA)	32
Fire clay mines in manu- factures.....	75	110	(NA)	1,593	1,721	1,520	(NA)	1,549	2,757	<sup>6</sup> 332	(NA)	(NA)	3,089	(NA)	(NA)	(NA)
Industry 1454.—Fuller's Earth																
1963.....	15	15	9	758	3,067	653	1,363	2,423	9,071	4,251	805	12,954	(D)	462	1,173	35
1958.....	13	14	6	652	2,399	527	1,145	1,673	5,955	3,053	263	8,692	(D)	285	579	(NA)
1954.....	15	16	6	564	1,744	510	1,109	1,381	4,179	1,819	539	6,012	6,012	306	525	23
1939.....	21	<sup>22</sup>	(NA)	678	746	562	1,051	438	1,402	<sup>6</sup> 705	(NA)	(NA)	2,107	187	(NA)	15
1929.....	(NA)	22	(NA)	1,096	1,156	991	(NA)	853	3,589	<sup>6</sup> 1,223	98	(NA)	4,812	370	(NA)	8
1919.....	(NA)	9	(NA)	873	635	824	(NA)	541	1,372	647	(NA)	2,019	2,019	(NA)	(NA)	3
1909.....	16	16	(NA)	359	157	327	(NA)	119	232	84	(NA)	316	316	(NA)	(NA)	2
1902.....	4	<sup>5</sup> 4	(NA)	128	44	<sup>8</sup> 114	(NA)	34	65	<sup>6</sup> 33	(NA)	(NA)	98	11	(NA)	(2)
Industry 1455.—Kaolin and Ball Clay																
1963.....	39	48	28	3,346	17,718	2,916	6,123	14,500	49,841	17,709	3,764	66,077	65,073	3,582	5,237	176
1958.....	41	53	26	3,394	14,014	2,722	5,675	9,719	30,990	12,682	2,913	42,434	(D)	2,580	4,151	(NA)
1954.....	40	54	28	3,148	9,943	2,820	6,159	8,115	25,249	8,333	2,601	31,892	31,878	2,012	4,291	97
1939 <sup>10</sup> .....	75	<sup>95</sup>	(NA)	3,434	2,467	3,168	5,987	1,830	5,437	<sup>6</sup> 1,802	(NA)	(NA)	7,239	1,010	(NA)	33
1889.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	636	330	(NA)	(NA)
1880.....	(NA)	<sup>9</sup>	(NA)	283	85	(NA)	(NA)	(NA)	175	25	(NA)	(NA)	200	23	(NA)	(2)

See footnotes at end of table.

TABLE 1. General Statistics: 1963 and Earlier Years—Continued

Industry and year	Operating companies  (number)	Establishments		All employees		Production, development, and exploration workers			Value added in mining  (\$1,000)	Cost of sup- plies, minerals received for preparation, fuels, pur- chased electric energy, and contract work  (\$1,000)	Cost of purchased machin- ery in- stalled  (\$1,000)	Value of shipments and receipts  (\$1,000)	Value of net ship- ments and receipts <sup>1</sup>  (\$1,000)	Quantity of primary prod- ucts  (1,000 short tons)	Capital expen- diture  (\$1,000)	Horse- power rating of power equip- ment  (1,000)
		Total  (number)	With 20 employ- ees or more  (number)	Total  (number)	Payroll  (\$1,000)	Total  (number)	Man-hours  (1,000)	Wages  (\$1,000)								
Industry 1456.—Feldspar																
1963.....	24	31	10	461	1,963	394	850	1,749	6,117	3,312	732	8,459	8,429	578	1,702	40
1958.....	64	74	10	567	1,919	496	1,028	1,515	4,531	2,387	1,277	6,889	6,433	439	1,306	(NA)
1954.....	58	84	10	616	1,722	579	1,235	1,523	4,048	2,735	294	6,669	6,239	692	408	.30
1939 <sup>11</sup> .....	47	<sup>5</sup> 59	(NA)	566	496	512	1,016	383	859	<sup>6</sup> 122	(NA)	(NA)	981	214	(NA)	6
1929 <sup>11</sup> .....	(NA)	51	(NA)	693	730	598	(NA)	527	1,599	6336	28	(NA)	1,935	205	(NA)	7
1919.....	(NA)	30	(NA)	378	317	349	(NA)	244	441	143	(NA)	584	584	(NA)	(NA)	2
1909 <sup>11</sup> .....	22	<sup>2</sup> 22	(NA)	275	136	248	(NA)	107	205	66	(NA)	271	271	(NA)	(NA)	1
1902.....	26	<sup>2</sup> 27	(NA)	279	127	<sup>2</sup> 252	(NA)	107	200	650	(NA)	(NA)	250	40	(NA)	1
1889.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	39	7	(NA)	(NA)
1880.....	(NA)	<sup>2</sup> 14	(NA)	119	39	(NA)	(NA)	(NA)	91	13	(NA)	(NA)	104	22	(NA)	(Z)
Industry 1459.—Clay and Related Minerals, N.E.C., and Miscellaneous Clays Mines in Manufactures																
1963, total.....	495	649	44	3,881	18,798	3,599	7,392	16,617	52,946	22,686	(NA)	75,282	(D)	35,909	(NA)	(NA)
Clay and related miner- als, n.e.c., industry....	115	130	34	1,961	10,688	1,679	3,577	8,507	24,481	14,813	2,642	38,944	(D)	6,519	2,992	133
Miscellaneous clays mines in manufactures.....	410	519	10	<sup>2</sup> 1,920	<sup>2</sup> 8,110	<sup>2</sup> 1,920	3,815	8,110	28,465	7,873	(NA)	<sup>3</sup> 36,338	<sup>3</sup> 36,338	29,390	(NA)	(NA)
1958, total.....	529	703	44	3,768	15,974	3,500	7,232	14,042	49,410	18,169	(NA)	65,795	(D)	30,204	(NA)	(NA)
Clay and related miner- als, n.e.c., industry....	113	126	36	1,999	8,920	1,731	3,695	6,988	19,132	11,926	2,187	29,274	(D)	4,972	3,971	(NA)
Miscellaneous clays mines in manufactures <sup>13</sup> .....	439	577	8	<sup>2</sup> 1,769	<sup>2</sup> 7,054	<sup>2</sup> 1,769	3,537	7,054	30,278	6,243	(NA)	<sup>3</sup> 36,521	<sup>3</sup> 36,521	25,232	(NA)	(NA)
1954, total.....	678	805	(NA)	3,883	12,424	3,774	7,612	11,943	30,481	10,903	(NA)	40,693	(D)	30,227	(NA)	(NA)
Clay and related miner- als, n.e.c., industry <sup>14</sup> .....	173	187	22	1,283	4,362	1,174	2,411	3,881	11,155	4,695	1,178	15,159	(D)	4,173	1,869	74
Miscellaneous clays mines in manufactures.....	(NA)	<sup>5</sup> 618	(NA)	<sup>2</sup> 2,600	<sup>2</sup> 8,062	<sup>2</sup> 2,600	5,201	8,062	19,326	6,208	(NA)	<sup>3</sup> 25,534	<sup>3</sup> 25,534	26,054	(NA)	(NA)
1939, total <sup>10</sup> .....	527	<sup>5</sup> 623	(NA)	3,294	3,310	3,205	6,083	3,161	6,413	1,464	(NA)	(NA)	7,877	16,223	(NA)	(NA)
Clay and related miner- als, n.e.c., industry....	(NA)	<sup>5</sup> 71	(NA)	719	813	677	(NA)	739	2,039	302	(NA)	(NA)	2,341	(NA)	(NA)	65
Miscellaneous clays mines in manufactures.....	467	<sup>5</sup> 550	(NA)	2,575	2,497	2,528	(NA)	2,422	4,374	<sup>6</sup> 1,162	(NA)	(NA)	5,536	(NA)	(NA)	(NA)
Fire clay, kaolin and ball clay, and clay and related minerals, n.e.c.	(NA)	204	(NA)	4,880	5,153	4,490	(NA)	4,224	9,917	2,880	503	(NA)	12,797	4,408	(NA)	35
1929.....	(NA)	356	(NA)	6,386	6,956	5,901	(NA)	6,019	9,549	2,675	(NA)	12,224	12,193	(NA)	(NA)	24
1919.....	273	274	(NA)	3,571	1,630	3,326	(NA)	1,397	2,562	452	(NA)	3,014	3,014	(NA)	(NA)	4
1902 <sup>11</sup> .....	205	<sup>2</sup> 206	(NA)	2,618	1,110	<sup>2</sup> 433	(NA)	959	1,815	<sup>6</sup> 286	(NA)	(NA)	2,101	1,416	(NA)	4
1860.....	(NA)	9	(NA)	95	31	(NA)	(NA)	(NA)	103	39	(NA)	(NA)	142	(NA)	(NA)	(NA)

Note: See appendix A for explanation of column captions. For more detailed historical statistics for these industries see table 1 of the corresponding chapter of the 1954 Census of Mineral Industries, Vol. 1.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. (Z) Less than one-half of the unit of measure specified.

<sup>1</sup>n.e.c. Not elsewhere classified.  
<sup>2</sup>Represents the product indicated by the name of the industry. For 1963, 1958, and 1954, for the mineral industries, represents net shipments (gross shipments less minerals received from other establishments for preparation) and for mines in manufacturing establishments, represents shipments of clay plus production of clay for use at the same establishment in the manufacture of cement, structural clay products, and pottery products. For 1939 and earlier years, represents net production.

<sup>3</sup>Number of production, development, and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations, hence, the same figures are shown for production, development, and exploration workers and for all employees.

<sup>4</sup>Includes the estimated value of clay produced and used in the same establishment in the manufacture of cement, structural clay products, and pottery products.  
<sup>5</sup>Represents the sum of figures shown for separate industries and probably includes some duplication due to the same company operating in more than one industry.

<sup>6</sup>Represents number of mines.

<sup>7</sup>Excludes the cost of minerals received for preparation.

<sup>8</sup>The figures for number of operating companies and number of establishments include data for 2 nonproducing establishments for which other data are combined with figures for metal mining.

<sup>9</sup>Figures for average employment were reduced to a 300-day basis for establishments which operated for a shorter period.

<sup>10</sup>Includes crude bentonite produced in other industries, amounting to less than one percent of the total shown.

<sup>11</sup>For 1939, establishments primarily producing rotary drilling muds were classified in the Kaolin and Ball Clay Industry. For later years, all clays were classified by type rather than by use and establishments primarily producing rotary drilling muds in that year were probably classified in the Bentonite Industry or the Clay and Related Minerals, N.E.C., Industry. For census years prior to 1939, according to the United States Bureau of Mines, there was no production of bentonite.

<sup>12</sup>Excludes nonproducing establishments as follows: For 1939, fire clay, 2 mines; feldspar, 1 mine and 1 plant. For 1929, feldspar, 3 establishments. For 1909, feldspar, 1 establishment; clay and related minerals, n.e.c., 17 establishments; for 1902, 7 clay and related minerals, n.e.c., 7 establishments.  
<sup>13</sup>For 1954, in addition to these establishments, 8 mines included in establishments classified in the manufacturing industries were reported. These mines produced and used in the same establishment 104 thousand tons of kaolin and ball clay, valued at approximately \$1,532 thousand. Man-hours worked by production, development, and exploration workers at these mines were 46 thousand; payroll, \$59 thousand; and cost of supplies, fuels, and purchased electric energy and contract work, \$33 thousand. Figures for these establishments are included in the totals for all clay and related minerals mines operated in 1954 and parts of manufacturing establishments. For 1939, includes data for 18 mines included in establishments classified in the manufacturing industries. These mines had products valued at \$362 thousand; with total employment of 197, of which 178 were production, development, and exploration workers; the corresponding payrolls were \$119 thousand and \$87 thousand, respectively; and cost of supplies, fuel, purchased electric energy and contract work was \$77 thousand.

<sup>14</sup>Excludes data for one mining operation in Hawaii with less than 5 employees.

<sup>15</sup>For 1954, and possibly for earlier years, excludes data for associated magnesite calcining operations. The quantity figures for magnesite included for 1954, and possibly for earlier years, represent shipments of crude material and transfers of crude or crushed and ground material to associated calcining plants.

TABLE 2. General Statistics by Geographic Areas and Type of Operation: 1963 and 1958

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of net shipments of primary products <sup>2</sup>	Capital expendi- tures	All employees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 short tons)	(\$1,000)	(number)	(\$1,000)	
INDUSTRY 1452.--BENTONITE														
Total.....	44	16	811	4,127	644	1,508	3,141	11,435	8,026	18,105	1,629	1,356	688	12,220
<u>Geographic Area</u>														
West North Central and West South Central.....	8	4	251	1,234	170	429	737	3,432	1,681	4,808	395	305	345	4,580
East South Central.....	9	3	172	580	149	316	462	2,588	1,209	3,385	294	412		
Mountain.....	17	7	293	1,580	241	587	1,290	4,579	4,522	8,802	859	299	343	7,640
Pacific.....	10	2	95	733	84	176	652	836	614	1,110	81	340		
California.....	7	2	93	727	82	172	646	843	585	1,093	80	335	65	871
<u>Type of Operation</u>														
Mines only.....	19		59	216	53	94	183	408	337	620	417	125	108	1,126
Mines with preparation plants.....	25	16	752	3,911	591	1,414	2,958	11,027	7,689	17,485	1,212	1,231	580	11,094
INDUSTRY 1453.--FIRE CLAY														
Fire clay industry and fire clay mines in manufactures, total.....	293	29	2,175	10,240	2,057	4,041	9,427	30,596	12,103	40,540	8,245	(NA)	2,278	25,848
Fire clay industry.....	155	14	979	4,608	861	1,640	3,795	12,640	6,624	17,105	3,552	2,159	1,473	14,540
Fire clay mines in manufac- tures.....	138	15	<sup>3</sup> 1,196	<sup>5</sup> 5,632	<sup>3</sup> 1,196	2,401	5,632	17,956	5,479	<sup>4</sup> 23,435	4,693	(NA)	<sup>3</sup> 805	11,308
<u>Geographic Area</u>														
Middle Atlantic, total.....	68	5	485	2,135	458	866	2,025	7,789	2,475	9,814	1,453	(NA)	646	6,622
Fire clay industry.....	45	3	289	1,195	262	477	1,093	3,512	1,720	4,792	727	440	457	3,603
Fire clay mines in manufac- tures.....	23	2	<sup>3</sup> 196	<sup>3</sup> 940	<sup>3</sup> 196	389	940	4,267	755	<sup>4</sup> 5,022	726	(NA)	<sup>3</sup> 189	3,019
New Jersey: Fire clay industry.....	7	-	51	198	47	85	181	480	147	575	69	52	120	651
Pennsylvania: Fire clay industry.....	38	3	238	997	215	392	912	3,032	1,573	4,217	659	388	337	2,952
East North Central, total.....	79	12	790	4,226	736	1,466	3,743	10,362	3,570	13,460	2,493	(NA)	650	7,428
Fire clay industry.....	36	7	368	2,059	314	623	1,576	3,767	1,554	4,849	1,295	472	282	3,866
Fire clay mines in manufac- tures.....	43	5	<sup>3</sup> 422	<sup>3</sup> 2,167	<sup>3</sup> 422	843	2,167	6,595	2,016	<sup>4</sup> 8,611	1,198	(NA)	<sup>3</sup> 368	3,562
Ohio.....	62	11	<sup>3</sup> 633	<sup>3</sup> 3,394	<sup>3</sup> 83	1,150	2,932	8,687	2,317	<sup>4</sup> 11,022	1,695	(NA)	<sup>3</sup> 538	6,291
Illinois.....	10	2	<sup>3</sup> 139	<sup>3</sup> 665	<sup>3</sup> 132	265	639	1,656	652	<sup>4</sup> 2,206	495	(NA)	<sup>3</sup> 81	686
West North Central, total.....	58	1	267	1,142	250	476	1,034	4,594	1,643	5,850	1,478	(NA)	337	4,946
Fire clay industry.....	26	1	116	484	99	176	376	2,567	854	3,034	630	387	303	3,894
Fire clay mines in manufac- tures.....	32	-	<sup>3</sup> 151	<sup>3</sup> 658	<sup>3</sup> 151	300	658	2,027	789	<sup>4</sup> 2,816	848	(NA)	<sup>3</sup> 34	1,052
Missouri.....	51	1	<sup>3</sup> 233	<sup>3</sup> 989	<sup>3</sup> 174	412	891	4,204	1,289	<sup>4</sup> 5,401	1,144	(NA)	<sup>3</sup> 318	4,424
South Atlantic.....	8	1	<sup>3</sup> 60	<sup>3</sup> 367	<sup>3</sup> 60	121	367	1,669	263	<sup>4</sup> 1,928	449	(NA)	<sup>3</sup> 134	800
East South Central, total.....	20	4	147	569	136	264	494	1,859	1,855	3,161	797	(NA)	322	2,469
Fire clay industry.....	17	3	111	427	100	193	352	1,505	1,700	2,652	444	553	296	1,711
Fire clay mines in manufac- tures.....	3	1	<sup>3</sup> 36	<sup>3</sup> 142	<sup>3</sup> 36	71	142	354	155	<sup>4</sup> 509	353	(NA)	<sup>3</sup> 26	758
Kentucky: Fire clay industry.....	8	1	35	152	29	48	123	451	381	779	161	53	231	1,450
Alabama: Fire clay industry.....	6	2	68	256	64	132	211	1,051	1,308	1,861	279	498	(NA)	(NA)
West South Central.....	22	4	<sup>3</sup> 240	<sup>3</sup> 999	<sup>3</sup> 240	492	999	2,196	1,094	<sup>4</sup> 3,280	730	(NA)	66	1,720
Mountain.....	22	-	<sup>3</sup> 58	<sup>3</sup> 232	<sup>3</sup> 56	108	222	564	266	<sup>4</sup> 792	238	(NA)	<sup>3</sup> 53	778
Colorado.....	19	-	<sup>3</sup> 54	<sup>3</sup> 220	<sup>3</sup> 52	100	210	536	254	<sup>3</sup> 753	217	(NA)	(NA)	(NA)
Pacific.....	15	2	125	525	120	244	525	1,441	909	2,132	607	(NA)	70	1,085
<u>Type of Operation (Fire Clay Industry)</u>														
Mines only:														
Open-pit.....	107	4	473	1,947	421	783	1,643	7,317	3,230	9,398	2,069	1,149	589	7,651
Mines with preparation plants.....	38	10	449	2,407	385	753	1,914	4,595	2,965	6,738	1,263	822	<sup>5</sup> 541	<sup>5</sup> 4,864
Underground.....	10	-	57	254	55	104	238	728	429	969	220	188	343	2,025

See footnotes at end of table.

TABLE 2. General Statistics by Geographic Areas and Type of Operation: 1963 and 1958—Con.

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of net shipments of primary products <sup>2</sup> (1,000 short tons)	Capital expendi- tures	All employees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
INDUSTRY 1454.--FULLER'S EARTH														
Total.....	15	9	758	3,067	653	1,363	2,423	9,071	5,056	12,954	462	1,173	652	5,955
<u>Geographic Area</u>														
South Atlantic.....	8	8	723	2,922	624	1,306	2,302	8,748	4,904	12,494	417	1,158	594	5,482
South Central and West.....	7	1	35	145	29	55	121	323	152	460	45	15	58	473
INDUSTRY 1455.--KAOLIN AND BALL CLAY														
Total.....	48	28	3,346	17,718	2,916	6,123	14,500	49,841	21,473	66,077	3,582	5,237	3,394	30,990
<u>Geographic Area</u>														
Northeast, North Central, and South Atlantic.....	30	19	2,827	15,153	2,456	5,160	12,428	42,585	18,811	56,646	2,902	4,750	2,935	25,148
Georgia.....	18	12	2,334	12,894	2,009	4,224	10,536	37,338	15,560	49,069	2,337	3,829	2,157	20,963
South Central.....	10	7	360	1,657	308	669	1,203	5,861	2,320	7,736	584	445	359	4,503
Tennessee.....	5	4	225	1,052	191	405	784	3,622	1,362	4,780	321	204	222	2,916
West.....	8	2	159	908	152	294	869	1,395	342	1,695	96	42	100	1,339
<u>Type of Operation</u>														
Mines with preparation plants (open pit).....	36	26	3,170	16,817	2,752	5,807	13,654	48,201	21,042	64,178	3,342	5,065	3,298	28,982
INDUSTRY 1456.--FELDSPAR														
Total.....	31	10	461	1,963	394	850	1,749	6,117	4,044	8,459	578	1,702	567	4,531
<u>Geographic Area</u>														
South.....	10	6	280	1,104	242	531	995	3,966	2,608	5,250	378	1,324	359	2,657
<u>Type of Operation</u>														
Producing mines with preparation plants.....	17	10	440	1,892	375	812	1,681	5,519	3,752	8,375	565	896	454	3,985
INDUSTRY 1459.--CLAY AND RELATED MINERALS, N.E.C.														
Clay and related minerals, n.e.c., industry and miscel- laneous clays mines in manu- factures, total.....	649	44	3,881	18,798	3,599	7,392	16,617	52,946	25,328	75,282	35,909	(NA)	<sup>6</sup> 3,768	<sup>6</sup> 49,410
Clay and related minerals, n.e.c., industry.....	130	34	1,961	10,688	1,679	3,577	8,507	24,481	17,455	38,944	6,519	2,992	1,999	19,132
Miscellaneous clays mines in manufactures.....	519	10	<sup>3</sup> 1,920	<sup>3</sup> 8,110	<sup>3</sup> 1,920	3,815	8,110	28,465	7,873	<sup>7</sup> 36,338	29,390	(NA)	<sup>3</sup> <sup>6</sup> 1,769	<sup>6</sup> 30,278
<u>Geographic Area</u>														
New England and Middle Atlantic...	81	7	<sup>3</sup> 528	<sup>3</sup> 2,760	<sup>3</sup> 504	1,053	2,564	7,357	3,676	10,681	3,931	(NA)	<sup>3</sup> 396	5,713
New York.....	20	3	<sup>3</sup> 191	<sup>3</sup> 1,219	<sup>3</sup> 178	405	1,082	1,931	1,668	<sup>7</sup> 3,355	1,241	(NA)	<sup>3</sup> 136	1,765
Pennsylvania.....	34	3	<sup>3</sup> 244	<sup>3</sup> 1,163	<sup>3</sup> 237	463	1,125	4,067	1,186	<sup>7</sup> 5,209	1,920	(NA)	<sup>3</sup> 137	2,471
East North Central, total.....	134	6	636	3,080	618	1,275	2,970	10,055	4,204	13,989	7,506	(NA)	667	8,206
Clay and related minerals, n.e.c., industry.....	12	6	259	1,500	241	557	1,390	3,375	2,721	5,826	1,295	270	230	1,846
Miscellaneous clays mines in manufactures.....	122	-	<sup>3</sup> 377	<sup>3</sup> 1,580	<sup>3</sup> 377	718	1,580	6,680	1,483	<sup>7</sup> 8,163	6,211	(NA)	<sup>3</sup> 437	6,360
Ohio.....	53	1	<sup>3</sup> 194	<sup>3</sup> 907	<sup>3</sup> 192	397	886	3,160	921	<sup>7</sup> 4,058	2,482	(NA)	<sup>3</sup> 253	3,224
Indiana.....	24	2	<sup>3</sup> 103	<sup>3</sup> 492	<sup>3</sup> 96	193	449	1,879	595	<sup>7</sup> 2,451	1,102	(NA)	<sup>3</sup> 111	1,121
Illinois, total.....	38	2	245	1,166	236	500	1,120	3,203	1,563	4,562	1,896	(NA)	225	2,360
Clay and related minerals, n.e.c., industry.....	7	2	145	753	128	299	707	1,676	1,205	2,677	647	204	116	758
Miscellaneous clays mines in manufactures.....	31	-	<sup>3</sup> 108	<sup>3</sup> 413	<sup>3</sup> 108	201	413	1,527	358	<sup>7</sup> 1,885	1,249	(NA)	<sup>3</sup> 109	1,602
Michigan.....	14	1	<sup>3</sup> 85	<sup>3</sup> 484	<sup>3</sup> 85	169	484	1,810	968	<sup>7</sup> 2,778	1,778	(NA)	(NA)	(NA)
West North Central, total.....	68	3	272	1,321	255	516	1,180	3,287	1,816	4,899	3,046	(NA)	305	3,379
Clay and related minerals, n.e.c., industry.....	13	3	128	655	111	228	514	1,247	1,136	2,179	522	204	147	1,147
Miscellaneous clays mines in manufactures.....	55	-	<sup>3</sup> 144	<sup>3</sup> 666	<sup>3</sup> 144	288	666	2,040	680	<sup>7</sup> 2,720	<sup>8</sup> 2,524	(NA)	<sup>3</sup> 158	2,232
Iowa.....	25	1	<sup>3</sup> 93	<sup>3</sup> 420	<sup>3</sup> 90	187	402	931	588	<sup>7</sup> 1,523	1,186	(NA)	<sup>3</sup> 63	871
Missouri.....	19	1	<sup>3</sup> 68	<sup>3</sup> 330	<sup>3</sup> 46	120	300	918	419	<sup>7</sup> 1,333	<sup>8</sup> 889	(NA)	<sup>3</sup> 104	991
Kansas.....	19	1	<sup>3</sup> 78	<sup>3</sup> 402	<sup>3</sup> 71	155	339	1,047	382	<sup>7</sup> 1,342	814	(NA)	<sup>3</sup> 59	1,039

See footnotes at end of table.

TABLE 2. General Statistics by Geographic Areas and Type of Operation: 1963 and 1958—Con.

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of net shipments of primary products <sup>2</sup>	Capital expendi- tures	All employees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 short tons)	(\$1,000)	(number)	(\$1,000)	
INDUSTRY 1459.--CLAY AND RELATED MINERALS, N.E.C.--Continued														
Geographic Area--Continued														
South Atlantic, total.....	110	9	752	3,071	677	1,382	2,551	9,226	4,259	12,490	<sup>8</sup> 7,989	(NA)	806	10,920
Clay and related minerals, n.e.c., industry.....	16	9	457	1,950	382	808	1,430	4,356	3,291	6,652	<sup>8</sup> 890	995	493	4,493
Miscellaneous clays mines in manufactures.....	94	-	<sup>2</sup> 295	<sup>3</sup> 1,121	<sup>2</sup> 295	574	1,121	4,870	968	<sup>7</sup> 5,838	7,099	(NA)	<sup>3</sup> 313	6,427
Maryland (miscellaneous clays mines in manufactures).....	8	-	<sup>3</sup> 22	<sup>3</sup> 94	<sup>3</sup> 22	42	94	570	108	<sup>7</sup> 678	878	(NA)	(NA)	(NA)
Virginia.....	25	4	<sup>2</sup> 244	<sup>3</sup> 1,126	<sup>2</sup> 201	427	830	3,173	1,453	<sup>7</sup> 4,338	2,307	(NA)	<sup>3</sup> 329	3,295
North Carolina, total.....	39	1	166	580	161	310	558	1,951	1,153	2,497	2,346	(NA)	<sup>3</sup> 184	3,440
Clay and related minerals, n.e.c., industry.....	5	1	58	214	53	101	192	482	835	710	119	607	(NA)	(NA)
Miscellaneous clays mines in manufactures.....	34	-	<sup>3</sup> 108	<sup>3</sup> 366	<sup>3</sup> 108	209	366	1,469	318	<sup>7</sup> 1,787	2,227	(NA)	(NA)	(NA)
South Carolina.....	17	1	<sup>3</sup> 99	<sup>3</sup> 438	<sup>3</sup> 90	228	364	1,321	622	<sup>7</sup> 1,896	1,156	(NA)	<sup>3</sup> 105	1,133
Georgia.....	16	1	<sup>3</sup> 144	<sup>3</sup> 558	<sup>3</sup> 137	269	498	1,235	497	<sup>7</sup> 1,717	1,152	(NA)	<sup>3</sup> 142	2,011
East South Central, total.....	65	5	293	1,219	276	550	1,058	3,443	1,782	5,071	3,932	(NA)	305	7,401
Clay and related minerals, n.e.c., industry.....	13	3	97	519	80	186	358	1,128	1,051	2,025	488	154	149	922
Miscellaneous clays mines in manufactures.....	52	2	<sup>3</sup> 196	<sup>3</sup> 700	<sup>3</sup> 196	364	700	2,315	731	<sup>7</sup> 3,046	3,444	(NA)	<sup>3</sup> 156	6,479
Tennessee.....	10	2	<sup>3</sup> 74	<sup>3</sup> 346	<sup>3</sup> 60	136	259	786	638	<sup>7</sup> 1,404	695	(NA)	<sup>3</sup> 103	1,746
Alabama.....	23	1	<sup>3</sup> 96	<sup>3</sup> 316	<sup>3</sup> 96	183	316	986	296	<sup>7</sup> 1,281	1,519	(NA)	<sup>3</sup> 123	3,343
West South Central, total.....	99	4	486	2,430	454	1,024	2,140	5,830	3,310	8,824	5,221	(NA)	582	3,703
Clay and related minerals, n.e.c., industry.....	23	4	243	1,297	216	515	1,064	3,081	2,030	4,795	1,121	316	341	2,198
Miscellaneous clays mines in manufactures.....	76	-	<sup>2</sup> 238	<sup>3</sup> 1,079	<sup>2</sup> 238	529	1,079	2,749	1,280	<sup>7</sup> 4,029	4,100	(NA)	<sup>3</sup> 241	1,505
Arkansas.....	13	-	<sup>3</sup> 43	<sup>3</sup> 206	<sup>3</sup> 43	64	206	424	167	<sup>7</sup> 584	601	(NA)	<sup>3</sup> 137	109
Louisiana.....	11	1	<sup>3</sup> 80	<sup>3</sup> 507	<sup>3</sup> 74	171	439	1,031	511	<sup>7</sup> 1,512	585	(NA)	<sup>3</sup> 92	840
Oklahoma.....	16	-	<sup>3</sup> 71	<sup>3</sup> 326	<sup>3</sup> 70	150	326	1,029	438	<sup>7</sup> 1,397	955	(NA)	<sup>3</sup> 62	427
Texas, total.....	59	3	287	1,337	267	653	1,170	3,446	2,063	5,331	3,080	(NA)	291	2,327
Clay and related minerals, n.e.c., industry.....	15	3	151	736	131	301	569	1,871	1,360	3,053	779	178	139	1,345
Miscellaneous clays mines in manufactures.....	44	-	<sup>3</sup> 136	<sup>3</sup> 601	<sup>3</sup> 136	352	601	1,575	703	<sup>7</sup> 2,278	2,301	(NA)	<sup>3</sup> 152	982
Mountain, total.....	42	3	394	2,299	337	664	1,894	6,265	3,195	9,168	930	(NA)	137	1,904
Clay and related minerals, n.e.c., industry.....	24	3	360	2,186	303	601	1,781	5,826	3,066	8,600	534	292	<sup>9</sup> 98	<sup>9</sup> 659
Miscellaneous clays mines in manufactures.....	18	-	<sup>3</sup> 34	<sup>3</sup> 113	<sup>3</sup> 34	63	113	439	129	<sup>7</sup> 568	396	(NA)	<sup>3</sup> 39	1,245
Colorado.....	13	1	<sup>3</sup> 83	<sup>3</sup> 444	<sup>3</sup> 70	147	359	897	537	<sup>7</sup> 1,428	247	(NA)	(NA)	(NA)
Pacific, total.....	50	7	520	2,618	477	922	2,260	7,483	3,096	10,160	3,378	(NA)	<sup>6</sup> 232	<sup>6</sup> 2,206
Clay and related minerals, n.e.c., industry.....	19	3	256	1,570	213	397	1,212	3,967	2,175	5,723	956	419	<sup>9</sup> 105	<sup>9</sup> 1,180
Miscellaneous clays mines in manufactures.....	31	4	<sup>3</sup> 264	<sup>3</sup> 1,048	<sup>3</sup> 264	525	1,048	3,516	921	<sup>7</sup> 4,437	2,422	(NA)	<sup>3</sup> 6127	<sup>6</sup> 1,026
California, total.....	32	6	351	1,692	336	683	1,576	4,751	1,930	6,502	3,043	(NA)	165	1,723
Clay and related minerals, n.e.c., industry.....	11	2	98	675	83	175	559	1,365	1,033	2,219	781	179	<sup>10</sup> 82	<sup>10</sup> 836
Miscellaneous clays mines in manufactures.....	21	4	<sup>3</sup> 253	<sup>3</sup> 1,017	<sup>3</sup> 253	508	1,017	3,386	897	<sup>7</sup> 4,283	2,262	(NA)	<sup>3</sup> 83	887
Type of Operation (Clay and Re- lated Minerals, N.E.C., Industry														
Mines only.....	67	-	200	747	183	347	677	2,021	1,002	2,619	1,250	404	<sup>11</sup> 206	<sup>11</sup> 1,736
Producing mines with preparation plants.....	63	34	1,761	9,941	1,496	3,230	7,830	22,460	16,453	36,325	5,293	2,588	<sup>11</sup> 1,793	<sup>11</sup> 17,396

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
<sup>1</sup>n.e.c. Not elsewhere classified.  
<sup>2</sup>General statistics for most States are not shown separately in this table in order to avoid disclosing figures for individual companies or because of the relatively small size of the statistics. Such States are shown below for 1963, with the number of establishments in each State (and in parentheses the number of employees or employment size range):  
SIC 1452, Bentonite: South Dakota, 2 (100-249); Alabama, 1 (5-9); Mississippi, 8 (100-249); Oklahoma, 1 (0-4); Texas, 5 (140); Wyoming, 10 (250-499); Colorado, 1 (0-4); Arizona, 1 (10-19); Utah, 1 (0-4); Nevada 4 (0-4); Washington, 1 (0-4); Oregon, 2 (0-4).  
Footnotes continued on next page

TABLE 2. General Statistics by Geographic Areas and Type of Operation: 1963 and 1958—Con

Footnotes for table 2--14D--Continued

SIC 1453, Fire Clay: Ohio, 26 (250-499); Indiana, 6 (26); Illinois, 4 (20-49); Iowa, 1 (0-4); Missouri, 24 (100-249); Kansas, 1 (0-4); Maryland, 1 (0-4); North Carolina, 1 (0-4); Florida, 1 (0-4); Tennessee, 1 (0-4); Mississippi, 2 (0-4); Oklahoma, 1 (0-4); Texas, 6 (10-19); Colorado 12 (20-49); Utah 2 (0-4); and California 6 (20-49).

Fire clay mines in manufactures: New Jersey, 1 (10-19); Pennsylvania, 22 (100-249); Ohio, 36 (250-499); Indiana, 1 (10-19); Illinois, 6, (50-99); Minnesota, 1 (0-4); Iowa, 2 (0-4); Missouri, 27 (119); Kansas, 2 (20-49); Maryland, 1 (0-4); West Virginia, 4 (50-99); Kentucky, 1 (10-19); Mississippi, 2 (20-49); Arkansas, 4 (82); Texas, 11 (147); Idaho, 1 (0-4); Colorado, 7 (20-49); Washington, 1 (10-19); California, 7 (50-99); and Hawaii, 1 (0-4).

SIC 1454, Fuller's Earth: Georgia, 6 (500-999); Florida, 2 (100-249); Tennessee, 2 (20-49); Mississippi, 1 (20-49); Texas, 2 (0-4); Utah, 1 (0-4); Nevada, 1 (0-4); and California, 1 (0-4).

SIC 1455, Kaolin and Ball Clay: Vermont, 1 (20-49); New York, 1 (20-49); Pennsylvania, 1 (10-19); Missouri, 1 (0-4); Maryland, 1 (5-9); North Carolina, 1 (10-19); South Carolina, 5 (250-499); Florida, 1 (20-49); Kentucky, 2 (50-99); Alabama, 1 (10-19); Mississippi, 1 (20-49); Arkansas, 1 (10-19); Idaho, 1 (10-19); Utah, 1 (100-249); and California, 6 (20-49).

SIC 1456, Feldspar: Maine, 2 (10-19); New Hampshire, 4 (20-49); Connecticut, 3 (50-99); South Dakota, 9 (20-49); Maryland, 1 (5-9); Virginia, 1 (20-49); North Carolina, 6 (197); Georgia, 1 (20-49); Tennessee, 1 (0-4); Colorado, 2 (10-19); and California, 1 (20-49).

SIC 1459, Clay and Related Minerals, N.E.C.: Massachusetts, 2 (10-19); New York, 4 (50-99); New Jersey, 1 (0-3); Pennsylvania, 3 (20-49); Ohio, 1 (20-49); Indiana, 3 (50-99); Michigan, 1 (20-49); Minnesota, 2 (20-49); Iowa, 3 (20-49); Missouri, 5 (20-49); Nebraska, 1 (0-4); Kansas, 2 (20-49); Virginia, 6 (100-249); West Virginia, 1 (20-49); South Carolina, 1 (50-99); Georgia, 2 (50-99); Florida, 1 (20-49); Kentucky, 5 (20-49); Tennessee, 2 (50-99); Alabama, 4 (0-4); Mississippi, 2 (0-4); Arkansas, 2 (0-4); Louisiana, 3 (50-99); Oklahoma, 3 (20-49); Montana, 3 (0-4); Idaho, 2 (0-4); Wyoming, 2 (20-49); Colorado, 7 (73); Arizona, 1 (5-9); Utah, 7 (20-49); Nevada, 2 (100-249); Washington, 4 (100-249); and Oregon, 4 (20-49).

Miscellaneous clay mines in manufactures: Maine, 3 (0-4); New Hampshire, 4 (5-9); Massachusetts, 3, (5-9); Connecticut, 5 (10-19); New York, 16 (100-249); New Jersey, 9 (20-49); Pennsylvania, 31 (100-249); Ohio, 52 (100-149); Indiana, 21 (20-49); Michigan, 13 (50-99); Wisconsin, 5 (5-9); Minnesota, 2 (5-9); Iowa, 22 (50-99); Missouri, 14 (20-49); Kansas, 17 (20-49); District of Columbia, 1 (0-4); Virginia, 19 (50-99); South Carolina, 16 (20-49); Georgia, 14 (50-99); Florida, 2 (0-4); Kentucky, 10 (20-49); Tennessee, 8 (10-19); Alabama, 19 (50-99); Mississippi, 15 (50-99); Arkansas, 11 (20-49); Louisiana, 8 (10-19); Oklahoma, 13 (45); Montana, 2 (0-4); Wyoming, 1 (0-4); Colorado, 6 (10-19); New Mexico, 2 (0-4); Arizona, 6 (10-19); Utah, 1 (0-4); Washington, 7 (0-4); Oregon, 2 (0-4); and Hawaii, 1 (0-4).

<sup>2</sup>Represents the product indicated by the name of the industry. For the mineral industries, represents net shipments (gross shipments less minerals received for preparation) and, for mines in manufacturing establishments, represents shipments of clay plus production of clay for use in the same establishment in the manufacture of cement, structural clay products, and pottery products.

<sup>3</sup>The number of production, development, and exploration workers at mines operated in conjunction with manufacturing plants was estimated from reported figures for man-hours. No data were obtained on other employees at such operation, hence, the same figures are shown for "Production, development, and exploration workers" and for "All employees."

<sup>4</sup>Includes the estimated value of fire clay produced and used in the same establishment in the manufacture of structural clay products and pottery products.

<sup>5</sup>In addition to producing mines with preparation plants, includes data for 5 combination open-pit and underground mines only, and for 2 nonproducing establishments.

<sup>6</sup>Excludes data for one miscellaneous clays mine in manufactures in Hawaii with 0-4 employees.

<sup>7</sup>Includes the estimated value of common clay and shale produced and used in the same establishment in the manufacture of cement, structural clay products, and pottery products.

<sup>8</sup>Represents gross shipments.

<sup>9</sup>Excludes data for two magnesite or brucite establishments with employment in the range 100-249.

<sup>10</sup>Excludes data for one magnesite or brucite establishment with employment in the range 0-4.

<sup>11</sup>Data for one magnesite or brucite mine without a preparation plant are included with those for mines with preparation plants.



TABLE 3. Detailed Statistics for Selected Geographic Areas and Types of Operation: 1963

Item	145.- Clay and related minerals industries, total	1452-Bentonite			1453-Fire Clay			
		United States, all operations	Mountain	Producing mines with preparation plants	United States, all operations	East North Central	Open-pit mines only	Mines with preparation plants
Establishments, total.....number..	423	44	17	25	155	36	107	38
With 0 to 19 employees.....do....	312	28	10	16	141	29	103	28
With 20 to 99 employees.....do....	99	16	7	16	14	7	4	10
With 100 employees and over.....do....	12	-	-	-	-	-	-	-
Including mines.....do....	423	44	17	32	155	36	107	38
Including preparation plants.....do....	201	32	14	32	38	8	-	38
Net shipments of primary products <sup>1</sup> .....1,000 short tons..	16,458	1,629	859	1,212	3,552	1,295	2,069	1,263
Value of shipments and receipts, total.....\$1,000..	161,644	18,105	8,802	17,485	17,105	4,849	9,398	6,738
Minerals transferred to other establishments for preparation and resales.....do....	2,483	18,105	8,802	17,485	207	4,849	-	207
Net shipments and receipts, total.....do....	159,161							
Primary products.....do....	156,175							
Other products and services.....do....	2,986	(D)	(D)	(D)	16,898	(D)	9,398	6,531
Value added in mining.....do....	113,585	(D)	(D)	(D)	16,289	(D)	9,200	(D)
Persons in industry, total.....number..	8,524	(D)	(D)	(D)	609	(D)	198	(D)
Production, development, and exploration workers, average for year.....do....	7,147	11,435	4,579	11,027	12,640	3,767	7,317	4,595
January.....do....	6,846	824	297	758	1,100	386	525	510
February.....do....	6,860							
March.....do....	6,948							
April.....do....	7,185							
May.....do....	7,202							
June.....do....	7,245							
July.....do....	7,159							
August.....do....	7,169							
September.....do....	7,132							
October.....do....	7,204							
November.....do....	7,174							
December.....do....	7,167							
Other employees.....do....	1,169							
Proprietors and firm members.....do....	208							
Performing manual labor.....do....	155							
Man-hours worked by production, development, and exploration workers, total.....1,000..	15,061	1,508	587	1,414	1,640	623	783	753
At mines, total.....do....	5,732	494	222	403	1,292	400	783	405
Underground.....do....	253	49	-	49	76	27	-	-
Open-pit.....do....	4,593	341	207	250	1,088	360	771	290
Surface (including mine shops and yards).....do....	886	104	15	104	128	13	12	115
At preparation plants.....do....	9,329	1,014	365	1,011	348	224	-	348
Man-hours spent on development and exploration work (included above).....do....	237	13	1	13	7	2	-	7
Principal expenses designated below, total.....\$1,000..	93,768	11,019	5,841	10,526	9,228	3,137	4,358	4,359
Wages of production, development, and exploration workers.....do....	34,115	3,141	1,290	2,958	3,795	1,576	1,643	1,914
Salaries of all other employees.....do....	8,056	986	290	953	813	483	304	493
Supplies.....do....	27,713	4,349	3,222	4,224	2,622	473	1,461	990
Minerals received for preparation.....do....	438							
Purchases for resale.....do....	1,882							
Purchased fuel.....do....	11,470	681	333	672	109	109	-	109
Purchased electric energy.....do....	5,019	514	260	514	222	222	337	269
Contract work.....do....	5,075	1,348	446	1,206	239	94	62	158
Purchased machinery installed.....do....	11,081	1,134	261	1,073	944	180	551	357
Capital expenditures, total.....do....	14,619	1,336	299	1,231	2,004	476	819	1,013
Development and exploration of mineral property.....do....	1,128	112	4	35	195	9	61	128
Preparation plant and other construction.....do....	3,299	358	27	358	574	143	201	296
New machinery and equipment.....do....	9,165	727	248	679	1,131	269	773	265
Used plant and equipment.....do....	1,027	159	20	159	259	51	114	133
Energy used.....million kwh. equivalent..	8,278	614	268	230	176	60	82	86
Coal.....1,000 short tons..	82	-	-	-	-	-	-	-
Distillate fuel oil.....1,000 barrels..	532	16	9	15	10	6	3	7
Residual fuel oil.....do....	313	74	55	50	5	1	-	4
Gas.....million cu. ft..	17,112	1,308	426	220	30	13	2	28
Gasoline.....1,000 gallons..	3,436	141	57	94	258	126	130	112
Other fuels.....\$1,000..	650	3	-	2	274	83	108	162
Undistributed.....do....	703	4	-	-	208	57	167	21
Electric energy purchased.....million kwh..	444	41	19	41	15	5	4	10
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy).....1,000..	512	42	18	27	86	30	46	27
Per production worker.....do....	72	65	75	46	100	96	109	70
Prime movers.....1,000..	328	21	11	8	74	25	40	21
Electric motors driven by purchased energy.....do....	183	21	7	19	11	5	5	6
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	1	-	-	-	1	-	1	-

See footnotes at end of table.

TABLE 3. Detailed Statistics for Selected Geographic Areas and Types of Operation: 1963—Con.

Item	145A—Fuller's Earth		145S—Kaolin and Ball Clay				145E—Feldspar		
	United States, all operations	South Atlantic	United States, all operations	Georgia	South Central	Producing open-pit mines with preparation plants	United States, all operations	South	Producing open-pit mines with preparation plants
Establishments, total.....number..	15	8	48	18	10	36	31	10	17
With 0 to 19 employees.....do....	6	-	20	6	3	10	21	4	7
With 20 to 99 employees.....do....	7	6	20	7	7	19	10	6	10
With 100 employees and over.....do....	2	2	8	5	-	7	-	-	-
Including mines.....do....	15	8	48	18	10	36	31	10	17
Including preparation plants.....do....	12	8	37	13	10	36	17	7	17
Net shipments of primary products <sup>1</sup> .....1,000 short tons..	462	417	3,582	2,337	584	3,342	578	378	565
Value of shipments and receipts, total.....\$1,000..	12,954	12,494	66,077	49,069	7,736	64,178	8,429	5,250	8,345
Minerals transferred to other establishments for preparation and resales.....do....		(D)	1,004			1,004	30	-	30
Net shipments and receipts, total.....do....	12,954	12,494	65,073	49,069	7,736	63,174	8,429	5,250	8,345
Primary products.....do....	10,094	9,692	65,073	(D)	7,687	62,998	7,624	5,005	7,540
Other products and services.....do....	(D)	(D)		(D)	(D)	176	805	245	805
Value added in mining.....do....	9,071	8,748	49,841	37,338	5,861	48,201	6,117	3,966	5,519
Persons in industry, total.....number..	763	725	3,367	2,338	365	3,180	470	283	440
Production, development, and exploration workers, average for year.....do....	653	624	2,916	2,009	308	2,752	394	242	375
January.....do....	620	593	2,784	1,950	282	2,635	406	245	376
February.....do....	646	618	2,790	1,948	280	2,642	403	244	373
March.....do....	677	648	2,821	1,988	281	2,685	406	246	376
April.....do....	680	651	2,881	1,987	313	2,711	410	247	380
May.....do....	682	653	2,880	2,006	307	2,723	400	243	370
June.....do....	647	618	2,918	2,019	318	2,760	401	241	371
July.....do....	637	608	2,943	2,023	321	2,762	389	237	383
August.....do....	631	602	2,938	2,018	320	2,760	390	237	384
September.....do....	613	584	2,947	2,041	312	2,766	373	238	377
October.....do....	634	604	3,000	2,017	319	2,817	380	239	374
November.....do....	614	585	3,001	2,013	320	2,818	373	241	367
December.....do....	618	589	2,982	2,027	300	2,799	375	230	369
Other employees.....do....	105	99	430	325	52	418	67	38	65
Proprietors and firm members.....do....	5	2	21	4	5	10	9	3	15
Performing manual labor.....do....	1	-	12	3	2	5	8	2	-
Man-hours worked by production, development, and exploration workers, total.....1,000..	1,363	1,308	6,123	4,224	689	5,807	850	531	812
At mines, total.....do....	206	194	1,679	822	329	1,410	227	115	189
Underground.....do....	-	-	121	-	-	-	-	-	-
Open-pit.....do....	198	186	1,282	697	253	1,159	166	89	130
Surface (including mine shops and yards).....do....	8	8	276	125	76	251	61	26	59
At preparation plants.....do....	1,157	1,114	4,444	3,402	360	4,397	623	416	623
Man-hours spent on development and exploration work (included above).....do....	13	13	182	111	27	182	19	18	9
Principal expenses designated below, total.....\$1,000..	7,318	7,025	35,427	25,661	3,653	34,166	5,275	3,298	5,160
Wages of production, development, and exploration workers.....do....	2,423	2,302	14,500	10,536	1,233	13,654	1,749	995	1,681
Salaries of all other employees.....do....	644	620	3,218	2,358	425	3,163	214	109	211
Supplies.....do....	2,525	2,466			21,520		1,889	1,203	1,867
Minerals received for preparation.....do....	-	-	11,924	8,345	-	11,631	30	-	30
Purchases for resale.....do....	(2)	(2)			(2)		-	-	-
Purchased fuel.....do....	1,035	975	3,236	2,447	289	3,219	331	222	315
Purchased electric energy.....do....	321	302	1,875	1,497	118	1,824	460	267	458
Contract work.....do....	370	360	674	478	69	674	602	502	600
Purchased machinery installed.....do....	805	801	3,764	2,793	324	3,694	732	414	484
Capital expenditures, total.....do....	1,173	1,158	5,237	3,829	445	5,065	1,702	1,324	896
Development and exploration of mineral property.....do....	-	-	478	430	46	475	210	210	8
Preparation plant and other construction.....do....	293	293	584	364	144	571	907	840	353
New machinery and equipment.....do....	776	761	4,094	2,980	250	3,939	468	237	418
Used plant and equipment.....do....	104	104	81	55	5	80	117	37	117
Energy used.....million kwh. equivalent..	748	697	2,547	1,874	374	2,317	155	109	148
Coal.....1,000 short tons..	-	-	1	-	-	1	-	-	-
Distillate fuel oil.....1,000 barrels..	19	13	100	78	13	100	56	47	54
Residual fuel oil.....do....	29	29	74	69	-	71	-	-	-
Gas.....million cu. ft..	2,021	1,896	6,296	4,514	1,067	6,269	37	-	37
Gasoline.....1,000 gallons..	204	189	933	347	345	864	153	72	127
Other fuels.....\$1,000..	19	19	184	145	-	171	-	-	-
Undistributed.....do....	-	-	18	5	-	18	7	-	7
Electric energy purchased.....million kwh..	28	26	212	176	11	1	40	26	40
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy).....1,000..	35	31	192	124	22	185	40	22	40
Per production worker.....do....	54	50	66	62	71	67	102	91	107
Prime movers.....1,000..	24	21	115	63	17	108	15	5	17
Electric motors driven by purchased energy.....do....	11	10	77	61	5	77	25	15	21
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	-	-	-	-	-	-	-	-	-

See footnotes at end of table.

TABLE 3. Detailed Statistics for Selected Geographic Areas and Types of Operation: 1963—Con.

Item	1459—Clay and Related Minerals, N.E.C.					
	United States, all operations	East North Central	South Atlantic	Mountain	Pacific	Producing mines with preparation plants
Establishments, total.....number..	130	12	16	24	19	63
With 0 to 19 employees.....do....	96	6	7	21	16	29
With 20 to 99 employees.....do....	32	6	9	2	2	32
With 100 employees and over.....do....	2	-	-	1	1	2
Including mines.....do....	130	12	16	24	19	64
Including preparation plants.....do....	65	8	12	8	8	64
Net shipments of primary products <sup>1</sup> .....1,000 short tons..	6,519	1,295	890	534	956	5,293
Value of shipments and receipts, total.....\$1,000..	38,944	5,826	6,652	8,600	5,723	36,325
Minerals transferred to other establishments for preparation and resales.....do....		-			-	
Net shipments and receipts, total.....do....	38,944	5,826	6,652	8,600	5,723	36,325
Primary products.....do....	37,481	5,826	(D)	7,833	5,723	35,193
Other products and services.....do....	(D)	-	(D)	(D)	-	(D)
Value added in mining.....do....	24,481	3,375	4,356	5,826	3,967	22,460
Persons in industry, total.....number..	2,000	262	458	364	265	1,769
Production, development, and exploration workers, average for year.....do....	1,679	241	382	303	213	1,496
January.....do....	1,598	252	376	290	168	1,401
February.....do....	1,603	250	380	290	170	1,410
March.....do....	1,607	249	377	290	172	1,415
April.....do....	1,757	250	407	307	237	1,546
May.....do....	1,756	249	393	307	236	1,549
June.....do....	1,779	249	413	304	239	1,570
July.....do....	1,652	234	379	300	206	1,562
August.....do....	1,638	229	370	300	202	1,554
September.....do....	1,641	236	370	300	204	1,549
October.....do....	1,674	232	341	307	235	1,466
November.....do....	1,666	232	382	307	233	1,459
December.....do....	1,659	230	384	307	234	1,448
Other employees.....do....	282	18	75	57	43	265
Proprietors and firm members.....do....	39	3	1	4	9	8
Performing manual labor.....do....	37	3	-	4	9	6
Man-hours worked by production, development, and exploration workers, total.....do....	3,577	557	808	601	397	3,230
At mines, total.....do....	1,834	345	420	323	249	1,493
Underground.....do....	7	-	-	7	-	-
Open-pit.....do....	1,518	286	301	298	240	1,204
Surface (including mine shops and yards).....do....	309	59	119	18	9	289
At preparation plants.....do....	1,743	212	388	278	148	1,737
Man-hours spent on development and exploration work (included above).....do....	(D)	-	(D)	-	-	(D)
Principal expenses designated below, total.....\$1,000..	25,501	3,682	4,528	4,990	3,487	23,935
Wages of production, development, and exploration workers.....do....	8,507	1,390	1,430	1,781	1,212	7,830
Salaries of all other employees.....do....	2,181	110	520	405	358	2,111
Supplies.....do....	26,492	829	1,583	1,221	700	6,325
Minerals received for preparation.....do....	24	-	-	-	-	-
Purchases for resale.....do....	(2)	-	-	-	-	91
Purchased fuel.....do....	5,550	946	677	989	725	5,336
Purchased electric energy.....do....	1,610	372	300	315	168	1,588
Contract work.....do....	1,137	35	18	279	324	745
Purchased machinery installed.....do....	2,642	539	713	262	258	2,459
Capital expenditures, total.....do....	2,992	270	995	292	419	2,588
Development and exploration of mineral property.....do....	133	54	14	6	35	119
Preparation plant and other construction.....do....	583	60	93	46	119	460
New machinery and equipment.....do....	1,969	130	850	139	245	1,758
Used plant and equipment.....do....	307	26	38	101	20	251
Energy used.....million kwh. equivalent..	4,038	627	543	301	309	3,956
Coal.....1,000 short tons..	81	45	20	-	-	81
Distillate fuel oil.....1,000 barrels..	331	42	37	120	69	329
Residual fuel oil.....do....	131	-	14	-	40	131
Gas.....million cu. ft..	7,420	425	841	124	241	7,419
Gasoline.....1,000 gallons..	1,747	74	236	838	245	1,660
Other fuels.....\$1,000..	170	10	-	2	15	168
Undistributed.....do....	466	238	36	17	55	166
Electric energy purchased.....million kwh..	108	16	23	23	17	107
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy).....1,000..	133	17	34	21	20	125
Per production worker.....do....	79	71	89	69	94	84
Prime movers.....1,000..	79	10	19	14	11	74
Electric motors driven by purchased energy.....do....	54	7	15	17	9	51
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	-	-	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Represents the product indicated by the name of the industry.<sup>2</sup>Figures for purchases for resale are included with those for supplies.

TABLE 4A. Selected Statistics, by Employment Size of Establishment: 1963

Industry and item	All establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
INDUSTRY 1452.—BENTONITE											
Establishments.....number..	44	16	3	9	13	3	-	-	-	-	-
All employees:											
Total.....do....	811	11	21	183	596	(D)	-	-	-	-	-
Payroll.....\$1,000..	4,127	29	51	947	3,100	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	644	10	18	118	498	(D)	-	-	-	-	-
Man-hours.....1,000..	1,508	20	27	250	1,211	(D)	-	-	-	-	-
Wages.....\$1,000..	3,141	28	32	507	2,574	(D)	-	-	-	-	-
Value added in mining.....do....	11,435	69	366	1,962	9,038	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	18,105	133	381	3,387	14,204	(D)	-	-	-	-	-
Capital expenditures.....do....	1,356	9	105	268	974	(D)	-	-	-	-	-
Producing establishments by type of operation, total.....number..	44	16	3	9	13	3	-	-	-	-	-
Mines only:											
Open-pit.....do....	17	13	1	3	-	-	-	-	-	-	-
Underground.....do....	1	1	-	-	-	-	-	-	-	-	-
Combination open-pit and underground.....do....	1	-	-	1	-	-	-	-	-	-	-
Mines with preparation plants:											
Open-pit.....do....	24	2	2	5	12	3	-	-	-	-	-
Underground.....do....	1	-	-	-	1	-	-	-	-	-	-
INDUSTRY 1453.—FIRE CLAY											
Establishments.....number..	155	99	27	15	13	1	-	-	-	-	-
All employees:											
Total.....do....	979	165	189	231	394	(D)	-	-	-	-	-
Payroll.....\$1,000..	4,608	640	797	1,076	2,095	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	861	153	169	217	322	(D)	-	-	-	-	-
Man-hours.....1,000..	1,640	292	312	412	624	(D)	-	-	-	-	-
Wages.....\$1,000..	3,795	611	693	924	1,567	(D)	-	-	-	-	-
Value added in mining.....do....	12,640	3,376	3,162	1,771	4,331	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	17,105	4,194	3,682	2,746	6,483	(D)	-	-	-	-	-
Capital expenditures.....do....	2,159	565	447	350	797	(D)	-	-	-	-	-
Producing establishments by type of operation, total.....number..	155	99	27	15	13	1	-	-	-	-	-
Mines only:											
Open-pit.....do....	107	76	19	8	4	-	-	-	-	-	-
Underground.....do....	10	4	4	2	-	-	-	-	-	-	-
Mines with preparation plants:											
Open-pit.....do....	37	18	4	5	9	1	-	-	-	-	-
Underground.....do....	1	1	-	-	-	-	-	-	-	-	-
INDUSTRY 1454.—FULLER'S EARTH											
Establishments.....number..	15	4	-	2	4	3	1	1	-	-	-
All employees:											
Total.....do....	758	35	-	(D)	88	635	(D)	(D)	-	-	-
Payroll.....\$1,000..	3,067	145	-	(D)	338	2,584	(D)	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	653	29	-	(D)	81	543	(D)	(D)	-	-	-
Man-hours.....1,000..	1,363	65	-	(D)	176	1,122	(D)	(D)	-	-	-
Wages.....\$1,000..	2,423	121	-	(D)	290	2,012	(D)	(D)	-	-	-
Value added in mining.....do....	9,071	323	-	(D)	918	7,830	(D)	(D)	-	-	-
Value of shipments and receipts.....do....	12,954	460	-	(D)	1,264	11,230	(D)	(D)	-	-	-
Capital expenditures.....do....	1,173	15	-	(D)	215	943	(D)	(D)	-	-	-
Producing establishments by type of operation, total.....number..	15	4	-	2	4	3	1	1	-	-	-
Mines only (open-pit).....do....	3	3	-	-	-	-	-	-	-	-	-
Mines with preparation plants (open-pit).....do....	12	1	-	2	4	3	1	1	-	-	-
INDUSTRY 1455.—KAOLIN AND BALL CLAY											
Establishments.....number..	48	7	3	10	15	5	4	3	1	-	-
All employees:											
Total.....do....	3,346	13	19	136	479	354	2,345	(D)	(D)	-	-
Payroll.....\$1,000..	17,718	39	80	609	2,112	1,617	13,261	(D)	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	2,916	12	16	127	435	298	2,028	(D)	(D)	-	-
Man-hours.....1,000..	6,123	25	29	257	928	589	4,295	(D)	(D)	-	-
Wages.....\$1,000..	14,500	35	70	548	1,823	1,178	10,846	(D)	(D)	-	-
Value added in mining.....do....	49,841	224	259	1,590	6,145	6,913	34,710	(D)	(D)	-	-
Value of shipments and receipts.....do....	66,077	271	343	2,327	8,725	8,656	45,755	(D)	(D)	-	-
Capital expenditures.....do....	5,237	5	43	144	946	1,026	3,073	(D)	(D)	-	-

See footnotes at end of table.

TABLE 4A. Selected Statistics, by Employment Size of Establishment: 1963—Continued

Industry and item	All establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
INDUSTRY 1455.—KAOLIN AND BALL CLAY—Continued											
Producing establishments by type of operation, total.....number..	47	7	3	9	15	5	4	3	1	-	-
Mines only:											
Open-pit.....do....	10	5	2	2	1	-	-	-	-	-	-
Combination open-pit and underground.....do....	1	-	-	-	-	-	1	-	-	-	-
Mines with preparation plants (open-pit)...do....	36	2	1	7	14	5	3	3	1	-	-
INDUSTRY 1456.—FELDSPAR											
Establishments.....number..	31	16	4	1	9	1	-	-	-	-	-
All employees:											
Total.....do....	461	37	27	(D)	397	(D)	-	-	-	-	-
Payroll.....\$1,000..	1,963	142	69	(D)	1,752	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	394	31	20	(D)	343	(D)	-	-	-	-	-
Man-hours.....1,000..	850	61	40	(D)	749	(D)	-	-	-	-	-
Wages.....\$1,000..	1,749	117	63	(D)	1,569	(D)	-	-	-	-	-
Value added in mining.....do....	6,117	178	789	(D)	5,150	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	8,459	362	132	(D)	7,965	(D)	-	-	-	-	-
Capital expenditures.....do....	1,702	2	826	(D)	871	(D)	-	-	-	-	-
Producing establishments by type of operation, total.....number..	27	14	2	1	9	1	-	-	-	-	-
Mines only (open-pit).....do....	10	10	-	-	-	-	-	-	-	-	-
Mines with preparation plants (open-pit)...do....	17	4	2	1	9	1	-	-	-	-	-
INDUSTRY 1459.—CLAY AND RELATED MINERALS, N.E.C.											
Establishments.....number..	130	61	11	24	28	4	2	-	-	-	-
All employees:											
Total.....do....	1,961	73	63	340	912	573	(D)	-	-	-	-
Payroll.....\$1,000..	10,688	230	242	1,592	5,138	3,486	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,679	70	55	296	769	489	(D)	-	-	-	-
Man-hours.....1,000..	3,577	142	101	613	1,674	1,047	(D)	-	-	-	-
Wages.....\$1,000..	8,507	225	217	1,319	3,937	2,809	(D)	-	-	-	-
Value added in mining.....do....	24,481	1,055	562	3,749	10,192	8,923	(D)	-	-	-	-
Value of shipments and receipts.....do....	38,944	1,552	723	5,532	17,735	13,402	(D)	-	-	-	-
Capital expenditures.....do....	2,992	338	68	606	1,786	194	(D)	-	-	-	-
Producing establishments by type of operation, total.....number..	128	59	11	24	28	4	2	-	-	-	-
Mines only:											
Open-pit.....do....	64	50	4	10	-	-	-	-	-	-	-
Underground.....do....	1	-	1	-	-	-	-	-	-	-	-
Mines with preparation plants:											
Open-pit.....do....	62	8	6	14	28	4	2	-	-	-	-
Underground.....do....	1	1	-	-	-	-	-	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. Data for this item are included in the underscored figures at the left. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.

TABLE 4B. Producing Establishments With Preparation Plants, by Employment Size of Establishment: 1963

Mineral preparation method	All establishments, total	Establishments with an average of—							
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees
INDUSTRY 1452.—BENTONITE									
Number of establishments with preparation plants.....	25	2	2	5	13	3	-	-	-
Number of establishments reporting specified preparation method: <sup>1</sup>									
Crushing, grinding, or pulverizing.....	24	2	2	4	13	3	-	-	-
Drying.....	17	-	-	5	10	2	-	-	-
Air separating, calcining, washing, and gravity or flotation.....	6	-	-	-	6	-	-	-	-
INDUSTRY 1453.—FIRE CLAY									
Number of establishments with preparation plants.....	38	19	4	5	9	1	-	-	-
Number of establishments reporting specified preparation methods: <sup>1</sup>									
Crushing, grinding, or pulverizing.....	33	16	3	5	8	1	-	-	-
Drying.....	8	-	-	2	5	1	-	-	-
Air separation.....	6	1	2	2	1	-	-	-	-
Calcining.....	4	-	2	2	-	-	-	-	-
Washing.....	6	2	2	2	-	-	-	-	-
INDUSTRY 1454.—FULLER'S EARTH									
Number of establishments with preparation plants.....	12	1	-	2	4	3	1	1	-
Number of establishments reporting specified preparation methods: <sup>1</sup>									
Crushing, grinding, or pulverizing.....	12	1	-	2	4	3	1	1	-
Drying.....	12	1	-	2	4	3	1	1	-
Calcining.....	5	-	-	2	2	-	1	-	-
Air separation.....	1	-	-	1	-	-	-	-	-
INDUSTRY 1455.—KAOLIN AND BALL CLAY									
Number of establishments with preparation plants.....	36	2	1	7	14	5	3	3	1
Number of establishments reporting specified preparation methods: <sup>1</sup>									
Crushing, grinding, or pulverizing.....	27	1	1	4	12	3	3	2	1
Drying.....	24	1	-	1	12	4	3	2	1
Washing.....	10	-	-	1	5	2	1	1	-
Air separation.....	15	-	1	3	7	-	2	2	-
Calcining.....	3	-	-	-	2	-	-	1	-
Washing.....	9	-	-	-	5	2	1	-	1
Gravity or flotation.....	7	-	-	-	5	-	-	2	-
INDUSTRY 1456.—FELDSPAR									
Number of establishments with preparation plants.....	17	4	2	1	9	1	-	-	-
Number of establishments reporting specified preparation methods: <sup>1</sup>									
Crushing, grinding, or pulverizing.....	17	4	2	1	9	1	-	-	-
Flotation or gravity.....	5	-	-	-	5	-	-	-	-
Drying.....	3	-	-	-	2	1	-	-	-
Air separation.....	2	-	-	-	2	-	-	-	-
Washing.....	1	-	-	-	1	-	-	-	-
INDUSTRY 1459.—CLAY AND RELATED MINERALS, N.E.C.									
Number of establishments with preparation plants.....	63	9	6	14	28	4	2	-	-
Number of establishments reporting specified preparation methods: <sup>1</sup>									
Crushing, grinding, or pulverizing.....	44	7	4	12	16	4	1	-	-
Calcining.....	12	-	1	2	6	2	1	-	-
Bloating.....	18	-	-	6	10	1	1	-	-
Drying.....	13	2	1	2	6	2	-	-	-
Air separation.....	4	-	-	-	3	1	-	-	-
Washing.....	6	-	-	1	3	2	-	-	-
Screening.....	2	-	-	-	-	2	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Some establishments reported more than one preparation method used and are included in the line for each method reported.

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts, and Net Shipments of Primary Products: 1963 and 1958

(In thousands of dollars)

Ind. code	Industry and year	Value of shipments and receipts of establishments classified in the industry					Value of net shipments of primary products of the industry shipped by establishments in all industries		
		Total	Primary products	Secondary products	Receipts for services	Products pur- chased and resold without further processing	Total (produced in all industries)	Produced in this industry	Produced in other industries
1452	Bentonite.....1963..	18,105	16,908	(D)	-	(D)	(D)	<sup>1</sup> 17,217	(D)
	1958..	16,843	16,603	(D)	(D)	-	23,207	<sup>1</sup> 16,505	<sup>2</sup> 6,702
1453	Fire clay.....1963..	17,105	16,358	(D)	(D)	138	<sup>3</sup> 40,489	16,289	<sup>3</sup> 24,200
	1958..	18,606	17,735	632	230	"	<sup>3</sup> 33,417	17,559	<sup>3</sup> 15,938
1454	Fuller's earth.....1963..	12,954	10,094	(D)	-	(D)	10,094	10,094	-
	1958..	8,692	(D)	(D)	-	(D)	6,778	6,778	-
1455	Kaolin and ball clay.....1963..	66,077	65,157	(D)	-	(D)	67,286	(D)	(D)
	1958..	42,434	(D)	463	-	(D)	47,664	(D)	(D)
1456	Feldspar.....1963..	8,459	7,654	805	-	-	8,203	7,624	579
	1958..	6,889	6,228	661	-	-	7,018	5,772	1,246
1459	Clay and related minerals, n.e.c.....1963..	38,944	37,505	1,252	(D)	(D)	<sup>4</sup> 75,356	37,481	<sup>4</sup> 37,875
	1958..	29,274	29,011	(D)	-	(D)	<sup>4</sup> 75,472	29,011	<sup>4</sup> 46,461

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Includes bentonite produced in other mineral industries, amounting to less than two percent of the total shown.

<sup>2</sup>Includes crude bentonite.

<sup>3</sup>Includes the estimated value of fire clay produced and used in the same establishment in the manufacture of cement and clay products.

<sup>4</sup>Includes the estimated value of common clay and shale produced and used in the same establishment in the manufacture of cement and clay products.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958

Product and geographic area	1963		1958	
	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
<b>BENTONITE</b>				
United States:				
Crude bentonite prepared in the mineral industries <sup>1</sup> .....	1,874	(X)	1,309	(X)
Crude bentonite net shipments <sup>2</sup> .....	241	1,207	396	1,394
Prepared bentonite shipped, including interplant transfers, total.....	(D)	(D)	1,343	21,813
Prepared in the mineral industries.....	1,404	16,010	3,162	315,111
Prepared in other industries.....	(D)	(D)	3,181	36,702
East and South regions:				
Crude bentonite prepared in the mineral industries <sup>1</sup> .....	762	(X)	444	(X)
Crude bentonite net shipments <sup>2</sup> .....	147	562	(NA)	(NA)
Prepared bentonite produced in the mineral industries.....	558	7,564	(NA)	(NA)
West region:				
Crude bentonite prepared in the mineral industries <sup>1</sup> .....	1,112	(X)	965	(X)
Crude bentonite net shipments <sup>2</sup> .....	94	145	4236	4646
Prepared bentonite produced in the mineral industries.....	846	8,446	(NA)	(NA)
<b>FIRE CLAY</b>				
United States:				
Crude fire clay mined and used or shipped, total.....	8,430	(X)	8,724	(X)
Mined and used in the same establishment:				
In making clay products.....	4,571	(X)	4,343	(X)
In making prepared clay.....	681	(X)	864	(X)
Received in the fire clay industry from other establishments for preparation	32	69	42	176
Shipments including interplant transfers.....	3,173	13,684	3,517	13,389
Prepared fire clay shipments including interplant transfers.....	1,069	5,817	1,033	6,070
Middle Atlantic division:				
Crude fire clay, total.....	1,633	(X)	1,631	(X)
Mined and used in the same establishment:				
In making clay products.....	697	(X)	797	(X)
In making prepared clay.....	105	(X)	122	(X)
Shipments including interplant transfers.....	831	4,015	712	3,232
Prepared fire clay shipments including interplant transfers.....	198	1,217	217	1,423
Pennsylvania:				
Crude fire clay, total.....	1,519	(X)	1,520	(X)
Mined and used in the same establishment:				
In making clay products.....	671	(X)	743	(X)
In making prepared clay.....	97	(X)	74	(X)
Shipments including interplant transfers.....	751	3,384	698	3,135
Prepared fire clay shipments including interplant transfers.....	172	925	174	932
North Central region:				
Crude fire clay, total.....	4,122	(X)	4,552	(X)
Mined and used in the same establishment:				
In making clay products.....	2,046	(X)	2,142	(X)
In making prepared clay.....	319	(X)	553	(X)
Shipments including interplant transfers.....	1,757	7,159	1,857	6,643
Prepared fire clay shipments including interplant transfers.....	508	2,486	597	3,526
East North Central division:				
Crude fire clay.....	3,072	(X)	3,087	(X)
Crude and prepared fire clay shipments including interplant transfers.....	1,638	5,982	1,305	5,139
Ohio:				
Crude fire clay.....	2,293	(X)	2,363	(X)
Crude and prepared fire clay shipments including interplant transfers.....	1,169	4,335	1,005	4,453
West North Central division:				
Crude fire clay.....	1,050	(X)	1,465	(X)
Crude and prepared fire clay shipments including interplant transfers.....	627	3,663	1,149	5,030
Missouri, crude fire clay.....	854	(X)	1,298	(X)
South region:				
Crude fire clay, total.....	1,868	(X)	1,498	(X)
Mined and used in the same establishment:				
In making clay products.....	1,402	(X)	902	(X)
In making prepared clay.....	254	(X)	170	(X)
Shipments including interplant transfers.....	212	1,085	426	2,386
Prepared fire clay shipments including interplant transfers.....	269	1,719	170	625

See footnotes at end of table.



TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	1963		1958	
	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
FIRE CLAY—Continued				
South region—Continued				
South Atlantic division, crude fire clay.....	271	(X)	431	(X)
East South Central division, crude fire clay.....	600	(X)	519	(X)
Kentucky:				
Crude fire clay, total.....	170	(X)	323	(X)
Mined and used in the same establishment in making clay products.....	21	(X)	30	(X)
Shipments including interplant transfers.....	149	736	293	1,950
West South Central division, crude fire clay.....	997	(X)	548	(X)
West region:				
Crude fire clay, total.....	807	(X)	1,043	(X)
Mined and used in the same establishment:				
In making clay products.....	426	(X)	502	(X)
In making prepared clay.....	3	(X)	19	(X)
Shipments including interplant transfers.....	378	1,425	522	1,128
Prepared fire clay shipments including interplant transfers.....	94	395	49	496
Mountain division:				
Crude fire clay.....	210	(X)	325	(X)
Crude and prepared fire clay shipments including interplant transfers.....	160	666	191	573
Pacific division:				
Crude fire clay.....	597	(X)	718	(X)
Crude and prepared fire clay shipments including interplant transfers.....	312	1,154	380	1,051
FULLER'S EARTH				
United States:				
Crude fuller's earth prepared <sup>5</sup> .....	777	(X)	468	(X)
Net shipments of fuller's earth <sup>6</sup> .....	462	10,094	285	6,778
South Atlantic division:				
Crude fuller's earth prepared <sup>5</sup> .....	708	(X)	380	(X)
Net shipments of fuller's earth <sup>6</sup> .....	417	9,692	245	(D)
KAOLIN AND BALL CLAY				
United States:				
Crude kaolin and ball clay:				
Prepared in the mineral industries <sup>1</sup> .....	4,923	(X)	2,730	(X)
Net shipments <sup>2</sup> .....	331	2,373	314	3,066
Prepared kaolin and ball clay shipped, including interplant transfers.....	3,269	64,913	2,311	44,598
South Atlantic division:				
South Carolina:				
Crude kaolin and ball clay:				
Prepared in the mineral industries <sup>1</sup> .....	525	(X)	364	(X)
Net shipments <sup>2</sup> .....	-	-	-	-
Prepared kaolin and ball clay shipped, including interplant transfers.....	445	6,212	344	4,607
Georgia:				
Crude kaolin and ball clay:				
Prepared in the mineral industries <sup>1</sup> .....	3,718	(X)	1,919	(X)
Net shipments <sup>2</sup> .....	2,362	50,524	145	855
Prepared kaolin and ball clay shipped, including interplant transfers.....			1,533	27,828
South Central division:				
Crude kaolin and ball clay:				
Prepared in the mineral industries <sup>1</sup> .....	589	(X)	369	(X)
Net shipments <sup>2</sup> .....	584	7,687	73	655
Prepared kaolin and ball clay shipped, including interplant transfers.....			330	4,868
Tennessee:				
Crude kaolin and ball clay:				
Prepared in the mineral industries <sup>1</sup> .....	312	(X)	204	(X)
Net shipments <sup>2</sup> .....	321	4,731	244	(D)
Prepared kaolin and ball clay shipped, including interplant transfers.....				2,873

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	1963		1958	
	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
FELDSPAR				
United States:				
Crude feldspar:				
Produced.....	1,052	(X)	506	(X)
Mined and prepared in the same establishment.....	71,035	(X)	377	(X)
Received in the feldspar industry from other establishments for preparation.....	(?)	(D)	56	456
Shipments, including interplant transfers.....	25	130	120	866
Prepared feldspar, including interplant transfers, total.....	593	8,130	465	6,608
Shipped in the feldspar industry.....	562	7,554	438	5,422
Shipped in the other industries.....	31	576	93	1,186
South region:				
Crude feldspar:				
Produced.....	602	(X)	305	(X)
Prepared.....	602	(X)	289	(X)
Prepared feldspar shipped, including interplant transfers.....	401	5,415	292	4,149
CLAY AND RELATED MINERALS, N.E.C.				
United States:				
Crude common clay and shale, total.....	37,101	(X)	31,683	(X)
Mined and used in the same establishment:				
In making cement and clay products <sup>10</sup> .....	28,880	(X)	24,821	(X)
In making prepared clay.....	5,872	(X)	4,818	(X)
Shipments, including interplant transfers.....	2,329	3,650	2,044	3,034
Prepared common clay and shale shipments, including interplant transfers, total.....	4,661	26,632	3,649	28,191
Prepared in the clay and related minerals, n.e.c., industry.....	4,629	22,976	3,339	18,808
Prepared in other industries.....	32	3,656	310	9,383
Aplite and kyanite:				
Mined and used in the same establishment in making prepared materials.....	553	(X)	327	(X)
Shipments, including interplant transfers, crude and prepared.....	204	4,021	225	2,601
Magnesite and olivine: <sup>11</sup>				
Mined and used in the same establishment in making prepared materials.....	554	(X)	512	(X)
Shipments, including interplant transfers, crude and prepared.....	198	8,694	163	7,695
New England division <sup>12</sup> , crude common clay and shale.....	462	(X)	389	(X)
Middle Atlantic division:				
Crude common clay and shale.....	3,474	(X)	3,460	(X)
Shipments, including interplant transfers.....	231	482	190	316
Prepared common clay and shale shipments, including interplant transfers.....	12,482	122,295	216	1,042
New York, crude common clay and shale.....	1,486	(X)	1,079	(X)
Pennsylvania, crude common clay and shale.....	1,600	(X)	1,764	(X)
East North Central division:				
Crude common clay and shale.....	7,922	(X)	7,345	(X)
Mined and used in the same establishment:				
In making cement and clay products.....	6,103	(X)	6,126	(X)
In making prepared clay.....	1,482	(X)	636	(X)
Shipments, including interplant transfers.....	337	412	583	720
Prepared common clay and shale shipments, including interplant transfers.....	1,193	5,581	526	2,918
Ohio, crude common clay and shale.....	2,558	(X)	3,048	(X)
Indiana, crude common clay and shale.....	1,077	(X)	(NA)	(X)
Illinois:				
Crude common clay and shale.....	1,936	(X)	1,789	(X)
Mined and used in the same establishment:				
In making cement and clay products.....	1,151	(X)	1,501	(X)
In making prepared clay.....	626	(X)	254	(X)
Shipments, including interplant transfers.....	159	230	34	54
Prepared common clay and shale shipments, including interplant transfers.....	521	2,715	203	1,003
Michigan, crude common clay and shale.....	2,238	(X)	1,424	(X)
West North Central division:				
Crude common clay and shale.....	3,157	(X)	2,720	(X)
Mined and used in the same establishment:				
In making cement and clay products.....	2,480	(X)	2,113	(X)
In making prepared clay.....	562	(X)	384	(X)
Shipments, including interplant transfers.....	115	180	223	308
Prepared common clay and shale shipments, including interplant transfers.....	487	2,081	329	2,053
Iowa, crude common clay and shale.....	1,049	(X)	(NA)	(NA)
Missouri, crude common clay and shale.....	917	(X)	891	(X)
South Atlantic division:				
Crude common clay and shale.....	7,938	(X)	6,349	(X)
Mined and used in the same establishment:				
In making cement and clay products.....	6,976	(X)	4,792	(X)
In making prepared clay.....	510	(X)	1,074	(X)
Shipments including interplant transfers.....	452	446	483	737
Prepared common clay and shale shipments, including interplant transfers.....	438	2,435	963	7,679

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	1963		1958	
	Quantity (1,000 short tons)	Value (\$1,000)	Quantity (1,000 short tons)	Value (\$1,000)
CLAY AND RELATED MINERALS, N.E.C.—Continued				
South Atlantic division--Continued				
Virginia, crude common clay and shale.....	1,212	(X)	1,408	(X)
North Carolina, crude common clay and shale.....	2,813	(X)	2,119	(X)
South Carolina, crude common clay and shale.....	1,146	(X)	(NA)	(X)
Georgia, crude common clay and shale.....	1,769	(X)	1,362	(X)
East South Central division:				
Crude common clay and shale.....	4,115	(X)	2,915	(X)
Mined and used in the same establishment:				
In making cement and clay products.....	3,384	(X)	2,449	(X)
In making prepared clay.....	502	(X)	385	(X)
Shipments, including interplant transfers.....	229	409	81	233
Prepared common clay and shale shipments, including interplant transfers....	401	1,901	276	1,306
Alabama, crude common clay and shale.....	1,557	(X)	1,264	(X)
West South Central division:				
Crude common clay and shale.....	5,590	(X)	5,307	(X)
Mined and used in the same establishment:				
In making cement and clay products.....	4,029	(X)	3,687	(X)
In making prepared clay.....	1,349	(X)	1,505	(X)
Shipments, including interplant transfers.....	212	214	115	76
Prepared common clay and shale shipments, including interplant transfers....	855	4,687	792	4,003
Louisiana, crude common clay and shale.....	699	(X)	1,050	(X)
Texas:				
Crude common clay and shale.....	3,364	(X)	3,336	(X)
Mined and used in the same establishment:				
In making cement and clay products.....	2,284	(X)	2,277	(X)
In making prepared clay.....	976	(X)	1,058	(X)
Shipments, including interplant transfers, crude and prepared.....	685	3,120	455	2,444
Mountain division:				
Crude common clay and shale.....	1,091	(X)	888	(X)
Mined and used in the same establishment:				
In making cement and clay products.....	389	(X)	525	(X)
In making prepared clay.....	437	(X)	193	(X)
Shipments, including interplant transfers.....	265	971	170	463
Prepared common clay and shale shipments, including interplant transfers....	337	1,767	166	1,035
Pacific division:				
Crude common clay and shale.....	3,352	(X)	2,310	(X)
Mined and used in the same establishment:				
In making cement and clay products.....	2,380	(X)	1,737	(X)
In making prepared clay.....	484	(X)	374	(X)
Shipments, including interplant transfers.....	488	536	199	181
Prepared common clay and shale shipments, including interplant transfers....	468	5,885	381	8,155
California:				
Crude common clay and shale.....	3,107	(X)	1,947	(X)
Mined and used in the same establishment:				
In making cement and clay products.....	2,220	(X)	(NA)	(X)
In making prepared clay.....	404	(X)	(NA)	(X)
Shipments, including interplant transfers.....	483	531	(NA)	(NA)
Prepared common clay and shale shipments, including interplant transfers....	403	478	(NA)	(NA)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.  
1Represents material mined and prepared at the same establishment and material received from other establishments for preparation.  
2Represents gross shipments less receipts from other establishments of crude materials for preparation.  
3Figures for bentonite prepared in mineral industries other than the Bentonite Industry are included with figures for "Prepared in other industries."  
4Represents gross shipments.  
5Represents material mined and prepared at the same establishment and, for 1958, material received from other establishments for preparation.  
6Represents gross shipments less, for 1958, receipts from other establishments of crude materials for preparation. There were no such receipts in 1963.  
7Feldspar received from other establishments for preparation is included with feldspar mined and prepared in the same establishment.  
8Represents shipments by all mineral industries.  
9Represents shipments by the manufacturing industries only.  
10Includes common clay and shale used in making such clay products as brick, tile, clay refractories, other structural clay products, and pottery and related products.  
11For 1958, includes brucite; no brucite was reported shipped in 1963.  
12For 1963, figures for prepared common clay and shale shipments in New England are included with those for such shipments in Middle Atlantic.

TABLE 6B. Product Classes—Indexes of Production and Unit Value for Primary Products Shipped by All Producers: 1963 and 1958

Product code	Product and year	Indexes (1954 = 100)	
		Production	Unit value
145	Clay and related minerals.....1963..	134	112
	.....1958..	110	114
1452	Bentonite.....1963..	136	84
	.....1958..	118	93
14522	Prepared bentonite.....1963..	142	82
	.....1958..	118	93
1453	Fire clay.....1963..	91	104
	.....1958..	92	95
14531	Crude fire clay.....1963..	89	107
	.....1958..	90	95
14532	Prepared fire clay.....1963..	97	88
	.....1958..	94	95
1454	Fuller's earth.....1963..	149	113
	.....1958..	92	123
1455	Kaolin and ball clay.....1963..	173	125
	.....1958..	124	123
14552	Prepared kaolin and ball clay.....1963..	176	127
	.....1958..	124	123
1456	Feldspar.....1963..	127	92
	.....1958..	107	94
14562	Prepared feldspar.....1963..	135	90
	.....1958..	106	93
1459	Clay and related minerals, n.e.c.....1963..	136	127
	.....1958..	114	136
14591	Crude common clay and shale.....1963..	121	213
	.....1958..	104	202
14592	Prepared common clay and shale.....1963..	167	128
	.....1958..	131	173
14593	Aplite, kyanite, magnesite, and olivine.....1963..	159	102
	.....1958..	140	94

n.e.c. Not elsewhere classified.

TABLE 6C. Shipments of Primary Products Distributed by Value  
Per Ton: 1963

Product and average value per ton f.o.b. mine or plant <sup>1</sup>	Quantity shipped		Value of shipments	
	Short tons (1,000)	Percent of total quantity	Value (\$1,000)	Percent of total value
<b>BENTONITE</b>				
Prepared bentonite, total <sup>2</sup> .....	1,404	100.0	16,010	100.0
\$6.15 to \$9.99.....	614	43.7	5,726	35.8
\$10.00 to \$12.49.....	217	15.5	2,289	14.3
\$12.50 to \$14.09.....	133	9.5	1,559	9.7
\$14.10 to \$17.89.....	399	28.4	5,461	34.1
\$17.90 and over.....	41	2.9	975	6.1
<b>FIRE CLAY</b>				
Crude fire clay, total.....	3,178	100.0	13,684	100.0
\$0.61 to \$0.99.....	268	8.4	211	1.5
\$1.00 to \$1.58.....	282	8.9	340	2.5
\$1.59 to \$2.03.....	492	15.5	762	5.6
\$2.04 to \$2.93.....	332	10.5	748	5.5
\$2.94 to \$3.33.....	217	6.8	609	4.5
\$3.34 to \$3.78.....	246	7.8	746	5.5
\$3.79 to \$4.83.....	232	7.3	880	6.4
\$4.84 to \$5.43.....	173	5.4	779	5.7
\$5.44 to \$6.94.....	435	13.7	2,390	17.4
\$6.95 to \$9.99.....	300	9.4	2,157	15.7
\$10.00 and over.....	201	6.3	4,062	29.7
Prepared fire clay, total.....	1,069	100.0	5,817	100.0
Less than \$3.35.....	167	15.6	365	6.3
\$3.35 to \$4.83.....	445	41.6	1,786	30.7
\$4.84 to \$6.13.....	157	14.7	738	12.7
\$6.14 to \$9.99.....	275	25.7	2,596	44.6
\$10.00 and over.....	25	2.4	332	5.7
<b>FULLER'S EARTH</b>				
Net shipments of fuller's earth, total.....	462	100.0	10,094	100.0
Less than \$15.91.....	18	3.9	230	2.3
\$15.91 to \$22.89.....	65	14.1	1,121	11.1
\$22.90 and over.....	379	82.0	8,743	86.6
<b>KAOLIN AND BALL CLAY</b>				
Crude kaolin and ball clay net shipments, total.....	331	100.0	2,373	100.0
Less than \$6.15.....	132	39.9	298	12.5
\$6.15 to \$9.98.....	126	38.1	884	37.3
\$9.99 and over.....	73	22.0	1,191	50.2
Prepared kaolin and ball clay, total.....	3,269	100.0	64,913	100.0
\$5.45 to \$11.10.....	243	7.4	1,695	2.6
\$11.10 to \$14.09.....	223	6.8	2,572	4.0
\$14.10 to \$17.89.....	585	17.9	8,158	12.6
\$17.90 to \$22.90.....	1,374	42.1	28,599	44.0
\$22.91 and over.....	844	25.8	23,889	36.8
<b>FELDSPAR</b>				
Crude feldspar net shipments, total.....	25	100.0	130	100.0
\$2.95 to \$6.13.....	9	36.0	38	21.5
\$6.14 to \$6.93.....	12	48.0	75	57.7
\$6.94 to \$7.83.....	4	16.0	27	20.8
Prepared feldspar, total <sup>3</sup> .....	562	100.0	7,554	100.0
\$8.85 to \$15.89.....	285	50.7	2,468	32.7
\$15.90 and over.....	277	49.3	5,086	67.3
<b>CLAY AND RELATED MINERALS, N.E.C.</b>				
Crude common clay and shale, total.....	2,329	100.0	3,650	100.0
Less than \$0.49.....	3	0.1	1	0.0
\$0.49 to \$0.99.....	417	17.9	362	9.9
\$1.00 to \$1.11.....	400	17.2	428	11.7
\$1.12 to \$1.40.....	518	22.2	614	16.8
\$1.41 to \$1.78.....	281	12.1	477	13.1
\$1.79 to \$2.03.....	350	15.0	650	17.8
\$2.04 to \$2.94.....	260	11.2	711	19.5
\$2.95 and over.....	100	4.3	407	11.2
Prepared common clay and shale, total.....	4,661	100.0	26,632	100.0
Less than \$3.35.....	567	12.2	1,331	5.0
\$3.35 to \$4.28.....	655	14.0	2,400	9.0
\$4.29 to \$4.83.....	485	10.4	1,964	7.4
\$4.84 to \$5.43.....	324	7.0	1,516	5.7
\$5.44 to \$6.13.....	900	19.3	4,680	17.6
\$6.14 to \$7.83.....	1,165	25.0	6,957	26.1
\$7.84 to \$8.84.....	406	8.7	3,393	12.7
\$8.85 and over.....	159	3.4	4,391	16.5

n.e.c. Not elsewhere classified.

<sup>1</sup>The "average values" are based on the entire shipments of the specified product by each establishment. Thus they are representative of varied average prices among establishments but not variations within an establishment.

<sup>2</sup>Represents material prepared in the Bentonite Industry only.

TABLE 7A. Supplies Used in the Industries: 1963 and 1958

(Detailed figures for the quantity and cost of supplies used were not obtained for these industries. For the total cost of supplies used see table 3. For the quantity and cost of minerals received for preparation, see table 6A. For the quantity and total cost of purchased fuels and electric energy used, see table 3.)

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963

Industry, geographic area, and type of operation	Aggregate horsepower per production worker		1963 (1,000 hp.)									
			Aggregate horsepower (prime movers and electric motors driven by purchased energy)					Prime movers (horsepower)				
	1963	1954	Total	By type of equipment				Total	By type of equipment			
				Loading equipment	Transportation equipment		All other equipment		Loading equipment	Transportation equipment		All other equipment
Highway type	Other	Highway type	Other									
BENTONITE INDUSTRY												
United States.....	65	63	42	7	9	12	14	21	7	9	4	1
Mountain division.....	75	(NA)	18	2	6	1	9	11	2	6	1	2
Producing mines with preparation plants....	46	(NA)	27	2	4	8	13	8	2	4	-	2
FIRE CLAY INDUSTRY												
United States.....	100	56	86	30	34	8	14	74	28	34	8	4
East North Central division.....	96	(NA)	30	9	11	3	7	25	8	11	3	3
Mines with preparation plants.....	70	(NA)	27	8	10	3	6	21	7	10	3	1
FULLER'S EARTH INDUSTRY												
United States.....	54	46	35	5	8	4	18	24	5	8	3	8
South Atlantic division.....	50	46	31	4	7	3	17	21	4	7	3	7
KAOLIN AND BALL CLAY INDUSTRY												
United States.....	66	34	192	47	55	14	76	115	40	55	13	7
South Atlantic division (Georgia).....	62	30	124	30	24	13	57	63	24	24	12	3
South Central division.....	71	49	22	6	10	-	6	17	5	10	-	2
Producing open-pit mines with preparation plants.....	67	(NA)	185	46	50	14	59	108	39	50	13	6
FELDSPAR INDUSTRY												
United States.....	102	52	40	5	6	3	26	15	5	6	3	1
South region.....	91	32	22	2	2	-	18	5	2	2	-	1
Producing open-pit mines with preparation plants.....	107	(NA)	40	5	6	3	26	15	5	6	3	1
CLAY AND RELATED MINERALS, N.E.C., INDUSTRY												
United States.....	79	63	133	26	34	18	55	79	21	34	16	8
East North Central division.....	71	89	17	4	3	3	7	10	3	3	3	1
South Atlantic division.....	89	53	34	8	8	4	14	19	6	8	4	1
Mountain division.....	69	21	3	7	2	9	14	2	7	2	3	3
Pacific division.....	94	90	20	2	5	4	9	11	2	5	3	1
Producing mines with preparation plants....	84	(NA)	125	25	33	15	52	74	20	33	14	7
Industry, geographic area, and type of operation	1963 (1,000 hp.)--Continued											
	Prime movers (horsepower)--Continued		Electric motors (horsepower)									
	By use		Total	By type of equipment			By source of power					
	Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated at same establishment				
BENTONITE INDUSTRY												
United States.....	-		21	21	-	8	13	21	-			
Mountain division.....	-		11	7	-	-	7	7	-			
Producing mines with preparation plants....	-		8	19	-	8	11	19	-			
FIRE CLAY INDUSTRY												
United States.....	3		71	13	2	-	11	12	1			
East North Central division.....	1		24	5	1	-	4	5	-			
Mines with preparation plants.....	1		20	6	1	-	5	6	-			
FULLER'S EARTH INDUSTRY												
United States.....	-		24	11	-	1	10	11	-			
South Atlantic division.....	-		21	10	-	-	10	10	-			

See footnotes at end of table.

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963—Continued

Industry, geographic area, and type of operation	1963 (1,000 hp.)--Continued							
	Prime movers (horsepower)- Continued		Electric motors (horsepower)					
	By use		Total	By type of equipment			By source of power	
	Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated at same establishment
KAOLIN AND BALL CLAY INDUSTRY								
United States.....	1	114	77	7	1	69	77	-
South Atlantic division (Georgia).....	-	63	61	6	1	54	61	-
South Central division.....	-	17	5	1	-	4	5	-
Producing open-pit mines with preparation plants.....	-	108	77	7	1	69	77	-
FELDSPAR INDUSTRY								
United States.....	5	10	25	-	-	25	25	-
South region.....	-	5	17	-	-	17	17	-
Producing open-pit mines with preparation plants.....	5	10	25	-	-	25	25	-
CLAY AND RELATED MINERALS, N.E.C., INDUSTRY								
United States.....	2	77	54	5	2	47	54	-
East North Central division.....	1	9	7	1	-	6	7	-
South Atlantic division.....	-	19	15	2	-	13	15	-
Mountain division.....	1	13	7	1	-	6	7	-
Pacific division.....	-	11	9	-	1	8	9	-
Producing mines with preparation plants....	2	72	51	5	1	45	51	-

Standard Notes: -Represents zero.  
n.e.c. Not elsewhere classified.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with average employment of--						
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
GROUP 145.—CLAY AND RELATED MINERALS								
Establishments.....number..	423	394	17	7	4	1	-	-
Reporting water use, total.....do....	260	232	16	7	4	1	-	-
By source of water:								
Utility.....do....	45	41	3	1	-	-	-	-
Other than utility.....do....	160	138	11	6	4	1	-	-
Source not specified.....do....	55	53	2	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	194	185	8	1	-	-	-	-
1 to 9 million gallons.....do....	15	11	3	1	-	-	-	-
10 to 19 million gallons.....do....	9	7	2	-	-	-	-	-
20 to 99 million gallons.....do....	10	6	-	3	-	1	-	-
100 million gallons and over.....do....	32	23	3	2	4	-	-	-
Employees.....do....	8,316	4,042	1,141	1,040	2,093	(D)	-	-
Establishments reporting water use.....do....	7,857	4,724	(D)	1,040	2,093	(D)	-	-
Value added in mining.....\$1,000..	113,585	50,167	16,865	13,604	32,949	(D)	-	-
Value added at establishments reporting water use.....do....	111,349	64,796	(D)	13,604	32,949	(D)	-	-
Industry 1452.—Bentonite								
Establishments.....number..	44	41	3	-	-	-	-	-
Reporting water use, total.....do....	30	27	3	-	-	-	-	-
By source of water:								
Utility.....do....	10	9	1	-	-	-	-	-
Other than utility.....do....	18	16	2	-	-	-	-	-
Source not specified.....do....	2	2	-	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	26	24	2	-	-	-	-	-
1 to 9 million gallons.....do....	3	2	1	-	-	-	-	-
20 to 99 million gallons.....do....	1	1	-	-	-	-	-	-
Employees.....do....	811	811	(D)	-	-	-	-	-
Establishments reporting water use.....do....	760	760	(D)	-	-	-	-	-
Value added in mining.....\$1,000..	11,435	11,435	(D)	-	-	-	-	-
Value added at establishments reporting water use.....do....	11,404	11,404	(D)	-	-	-	-	-
Industry 1453.—Fire Clay								
Establishments.....number..	155	154	1	-	-	-	-	-
Reporting water use, total.....do....	86	85	1	-	-	-	-	-
By source of water:								
Utility.....do....	9	9	-	-	-	-	-	-
Other than utility.....do....	45	44	1	-	-	-	-	-
Source not specified.....do....	32	32	-	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	75	74	1	-	-	-	-	-
1 to 9 million gallons.....do....	1	1	-	-	-	-	-	-
10 to 19 million gallons.....do....	1	1	-	-	-	-	-	-
100 million gallons and over.....do....	9	9	-	-	-	-	-	-
Employees.....do....	979	979	(D)	-	-	-	-	-
Establishments reporting water use.....do....	773	773	(D)	-	-	-	-	-
Value added in mining.....\$1,000..	12,640	12,640	(D)	-	-	-	-	-
Value added at establishments reporting water use.....do....	11,445	11,445	(D)	-	-	-	-	-
Industry 1454.—Fuller's Earth								
Establishments.....number..	15	10	3	1	1	-	-	-
Reporting water use, total.....do....	15	10	3	1	1	-	-	-
By source of water:								
Utility.....do....	5	3	2	-	-	-	-	-
Other than utility.....do....	8	5	1	1	1	-	-	-
Source not specified.....do....	2	2	-	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	9	8	1	-	-	-	-	-
1 to 9 million gallons.....do....	3	1	2	-	-	-	-	-
20 to 99 million gallons.....do....	1	1	-	-	-	-	-	-
100 million gallons and over.....do....	2	-	-	1	1	-	-	-
Employees.....do....	758	123	635	(D)	(D)	-	-	-
Establishments reporting water use.....do....	758	123	635	(D)	(D)	-	-	-
Value added in mining.....\$1,000..	9,071	1,241	7,830	(D)	(D)	-	-	-
Value added at establishments reporting water use.....do....	9,071	1,241	7,830	(D)	(D)	-	-	-

See footnotes at end of table.



TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963—Continued

Item	Establishments, total	Establishments with average employment of--						
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
Industry 1455.—Kaolin and Ball Clay								
Establishments.....number..	48	35	5	4	3	1	-	-
Reporting water use, total.....do....	42	29	5	4	3	1	-	-
By source of water:								
Utility.....do....	4	3	-	1	-	-	-	-
Other than utility.....do....	32	21	4	3	3	1	-	-
Source not specified.....do....	6	5	1	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	29	24	4	1	-	-	-	-
1 to 9 million gallons.....do....	4	3	-	1	-	-	-	-
20 to 99 million gallons.....do....	3	-	-	2	-	1	-	-
100 million gallons and over.....do....	6	2	1	-	3	-	-	-
Employees.....do....	3,346	647	354	573	<u>1,772</u>	(D)	-	-
Establishments reporting water use.....do....	3,302	603	354	573	<u>1,772</u>	(D)	-	-
Value added in mining.....\$1,000..	49,841	8,218	6,913	6,118	<u>28,592</u>	(D)	-	-
Value added at establishments reporting water use.....do....	49,616	7,993	6,913	6,118	<u>28,592</u>	(D)	-	-
Industry 1456.—Feldspar								
Establishments.....number..	31	30	1	-	-	-	-	-
Reporting water use, total.....do....	18	17	1	-	-	-	-	-
By source of water:								
Utility.....do....	4	4	-	-	-	-	-	-
Other than utility.....do....	12	11	1	-	-	-	-	-
Source not specified.....do....	2	2	-	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	10	10	-	-	-	-	-	-
20 to 99 million gallons.....do....	1	1	-	-	-	-	-	-
100 million gallons and over.....do....	7	6	1	-	-	-	-	-
Employees.....do....	461	<u>461</u>	(D)	-	-	-	-	-
Establishments reporting water use.....do....	443	<u>443</u>	(D)	-	-	-	-	-
Value added in mining.....\$1,000..	6,117	<u>6,117</u>	(D)	-	-	-	-	-
Value added at establishments reporting water use.....do....	6,063	<u>6,063</u>	(D)	-	-	-	-	-
Industry 1459.—Clay and Related Minerals, N.E.C.								
Establishments.....number..	130	124	4	2	-	-	-	-
Reporting water use, total.....do....	69	64	3	2	-	-	-	-
By source of water:								
Utility.....do....	13	13	-	-	-	-	-	-
Other than utility.....do....	45	41	2	2	-	-	-	-
Source not specified.....do....	11	10	1	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....do....	45	45	-	-	-	-	-	-
1 to 9 million gallons.....do....	4	4	-	-	-	-	-	-
10 to 19 million gallons.....do....	8	6	2	-	-	-	-	-
20 to 99 million gallons.....do....	4	3	-	1	-	-	-	-
100 million gallons and over.....do....	8	6	1	1	-	-	-	-
Employees.....do....	1,961	1,388	573	(D)	-	-	-	-
Establishments reporting water use.....do....	1,821	<u>1,821</u>	(D)	(D)	-	-	-	-
Value added in mining.....\$1,000..	24,481	15,558	<u>8,923</u>	(D)	-	-	-	-
Value added at establishments reporting water use.....do....	23,750	<u>23,750</u>	(D)	(D)	-	-	-	-

- Represents zero.

(D) Withheld to avoid disclosing figures for individual companies. Data for this item are included in the underscored figures to the left.

n.e.c. Not elsewhere classified.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963

Type of operation and tons per man-hour <sup>1</sup>	Establish- ments  (number)	All employees		Production, development, and exploration workers			Value added in mining  (\$1,000)	Value of ship- ments and receipts  (\$1,000)	Capital expenditures  (\$1,000)
		Total	Payroll	Total	Man-hours	Wages			
		(number)	(\$1,000)	(number)	(1,000)	(\$1,000)			
INDUSTRY 1452.—BENTONITE									
All establishments, total.....	44	811	4,127	644	1,508	3,141	11,435	18,105	1,356
Less than 0.20.....	4	43	225	37	47	202	267	329	59
0.20 to 0.39.....	4	84	353	74	171	298	1,024	1,237	272
0.40 to 0.59.....	2	209	1,152	186	460	1,007	3,134	4,000	492
0.60 to 0.79.....	1								
0.80 to 0.99.....	1								
1.00 to 1.19.....	1								
1.20 to 1.49.....	4	180	873	154	372	772	3,648	5,388	187
1.50 to 1.99.....	1								
Undistributed <sup>2</sup> .....	26	295	1,524	193	458	862	3,362	7,142	346
INDUSTRY 1453.—FIRE CLAY									
All establishments, total.....	155	979	4,608	861	1,640	3,795	12,640	17,105	2,159
Less than 0.40.....	11	51	186	46	86	171	259	284	61
0.40 to 0.59.....	4	24	85	22	29	76	156	176	7
0.60 to 0.79.....	8	173	887	142	268	662	1,218	1,540	130
0.80 to 0.99.....	5	45	179	45	89	179	610	695	154
1.00 to 1.39.....	9	91	429	88	165	402	1,134	1,346	86
1.40 to 1.79.....	9	102	524	91	183	442	1,091	1,419	135
1.80 to 1.99.....	2								
2.00 to 2.39.....	7								
2.40 to 2.79.....	4								
2.80 to 2.99.....	3	21	88	17	34	71	141	188	13
3.00 to 3.99.....	7	21	99	19	36	87	270	373	21
4.00 to 4.99.....	7	46	212	41	75	186	470	771	65
5.00 to 5.99.....	3	14	83	14	27	83	265	345	29
6.00 to 6.99.....	3								
7.00 to 7.99.....	4	23	113	22	44	108	589	733	117
8.00 to 8.99.....	1	16	41	15	18	38	414	522	11
10.00 and over.....	2								
Undistributed <sup>2</sup> .....	71	276	1,212	234	465	938	5,046	7,461	1,190
Open-pit mines without preparation plants, total.....	107	473	1,947	421	783	1,643	7,317	9,398	1,149
Less than 0.40.....	7	26	105	26	47	105	127	160	24
0.40 to 0.59.....	2	68	247	66	126	232	590	681	45
0.60 to 0.79.....	6								
0.80 to 0.99.....	3								
1.00 to 1.39.....	2								
1.40 to 1.99.....	7	41	172	40	76	165	666	751	77
2.00 to 2.39.....	7	38	170	36	68	159	553	685	112
2.40 to 2.99.....	4	26	97	24	41	86	209	269	27
3.00 to 3.99.....	6	32	154	26	50	125	227	318	34
4.00 to 4.99.....	6	43	200	38	70	168	435	745	56
5.00 to 5.99.....	3	9	52	9	21	52	219	283	25
6.00 to 6.99.....	2	19	95	18	33	90	459	552	80
7.00 to 7.99.....	2								
8.00 to 8.99.....	1								
10.00 and over.....	2								
Undistributed <sup>2</sup> .....	52	155	614	123	233	423	3,418	4,432	658
INDUSTRY 1454.—FULLER'S EARTH									
All establishments, total.....	15	758	3,067	653	1,363	2,423	9,071	12,954	1,173
0.10 to 0.29.....	4	549	2,302	474	1,034	1,831	6,421	9,480	905
0.30 to 0.39.....	1	113	455	97	213	348	1,691	2,397	101
0.40 to 0.79.....	3								
Undistributed <sup>2</sup> .....	7	96	310	82	116	244	959	1,077	167
INDUSTRY 1455.—KAOLIN AND BALL CLAY									
All establishments, total.....	48	3,346	17,718	2,916	6,123	14,500	49,841	66,077	5,237
Less than 0.10.....	3	44	152	37	85	123	92	145	25
0.10 to 0.29.....	4	474	2,630	471	1,048	2,618	5,160	6,248	823
0.30 to 0.39.....	2	946	5,259	761	1,600	3,844	10,626	14,239	726
0.40 to 0.49.....	2								
0.50 to 0.59.....	3								
0.60 to 0.69.....	7								
0.70 to 0.89.....	7	110	480	98	202	379	833	1,374	83
0.90 to 1.49.....	7	781	4,543	705	1,529	3,897	13,102	17,341	1,215
1.50 to 1.99.....	7	599	2,821	478	954	1,967	11,619	15,695	1,030
2.00 to 2.99.....	8	291	1,326	278	506	1,256	7,253	9,548	1,155
3.00 and over.....	1								
Undistributed <sup>2</sup> .....	11	101	507	88	199	416	1,156	1,487	180

See footnotes at end of table.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963—Continued

Type of operation and tons per man-hour <sup>1</sup>	Establish- ments	All employees		Production, development, and exploration workers			Value added in mining	Value of ship- ments and receipts	Capital expenditures
		Total	Payroll	Total	Man-hours	Wages			
	(number)	(number) <sup>2</sup>	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
INDUSTRY 1456.—FELDSPAR									
All establishments, total.....	31	461	1,963	394	850	1,749	6,117	8,459	1,702
Less than 0.20.....	1	72	224	51	109	196	368	577	31
0.20 to 0.39.....	3								
0.40 to 0.59.....	4								
0.60 and over.....	9								
Undistributed <sup>2</sup> .....	14	104	390	90	198	304	1,879	2,441	948
INDUSTRY 1459.—CLAY AND RELATED MINERALS, N.E.C.									
All establishments, total.....	130	1,961	10,688	1,679	3,577	8,507	24,481	38,944	2,992
Less than 0.20.....	5	295	1,688	255	547	1,328	4,932	7,192	97
0.20 to 0.59.....	15	335	1,634	263	504	1,105	4,652	5,798	349
0.60 to 0.99.....	4	78	450	65	164	363	639	1,383	142
1.00 to 1.19.....	3	93	563	86	197	504	1,116	1,636	98
1.20 to 1.49.....	5	110	453	98	208	368	898	1,510	8
1.50 to 1.99.....	10	246	1,331	230	518	1,212	2,940	4,942	968
2.00 to 2.99.....	11	315	1,914	269	589	1,485	4,331	7,024	333
3.00 to 6.99.....	14	156	753	135	264	640	1,539	3,041	161
7.00 and over.....	13	144	911	123	261	739	2,374	3,605	375
Undistributed <sup>2</sup> .....	50	189	991	155	325	763	1,060	2,813	461

n.e.c. Not elsewhere classified.  
<sup>1</sup>Represents short tons of primary products of the industry shipped per man-hour worked by production, development, and exploration workers.  
<sup>2</sup>Represents nonproducing establishments and establishments with no production, development, or exploration worker man-hours, with man-hours spent on exploration or development work amounting to 30 percent or more of total man-hours of production, development, and exploration workers, with cost of contract work amounting to 30 percent or more of production, development, and exploration worker wages, or with number of working proprietors amounting to 30 percent or more of number of production, development, and exploration workers. Also, includes figures for the number and payroll of employees at separately reported central offices and related facilities.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining, by Geographic Areas: 1963

Ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expendi- tures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
INDUSTRY 1452.—BENTONITE									
United States, total.....	44	811	4,127	644	1,508	3,141	11,435	18,105	1,356
Less than 0.19.....	6	67	281	55	128	218	2,485	2,984	243
0.20 to 0.29.....	5	227	1,004	198	524	886	4,494	5,902	297
0.30 to 0.49.....	7	213	879	178	385	721	2,613	4,767	297
0.50 and over.....	14	260	1,651	211	467	1,310	1,846	4,419	514
Undistributed <sup>2</sup> .....	12	44	312	2	4	6	(3)	33	5
West region, total.....	27	388	2,313	325	763	1,942	5,415	9,912	639
Less than 0.19.....	3	32	171	29	86	159	1,223	1,381	62
0.20 to 0.49.....	4	155	750	128	301	634	2,645	4,735	132
0.50 and over.....	9	199	1,386	166	372	1,143	1,549	3,763	440
Undistributed <sup>2</sup> .....	11	2	6	2	4	6	(3)	33	5
INDUSTRY 1453.—FIRE CLAY									
United States, total.....	154	979	4,608	861	1,640	3,795	12,640	17,105	2,159
Less than 0.10.....	13	37	127	31	48	98	2,750	2,847	325
0.10 to 0.19.....	10	64	275	64	135	275	1,861	2,707	605
0.20 to 0.29.....	17	55	270	51	105	252	1,071	1,425	212
0.30 to 0.39.....	16	128	646	110	215	445	1,922	2,349	196
0.40 to 0.49.....	24	226	943	213	410	885	2,145	2,779	308
0.50 to 0.59.....	19	164	712	139	257	533	1,317	2,124	220
0.60 to 0.69.....	9	62	293	54	92	235	448	623	133
0.70 to 0.79.....	3	38	214	29	55	149	272	411	1
0.80 to 0.99.....	4	27	152	24	45	139	174	243	64
1.00 and over.....	11	142	825	107	208	607	676	1,108	95
Undistributed <sup>2</sup> .....	29	36	151	39	70	151	4	489	-
Middle Atlantic division, total.....	45	289	1,195	262	477	1,093	3,512	4,792	440
Less than 0.29.....	11	31	123	26	49	110	1,373	1,509	168
0.30 to 0.39.....	4	19	82	19	39	82	230	281	44
0.40 to 0.49.....	11	88	393	84	165	377	874	1,078	99
0.50 to 0.59.....	8	83	303	66	109	241	561	963	13
0.60 and over.....	5	43	194	39	66	170	268	422	116
Undistributed <sup>2</sup> .....	6	25	100	25	49	100	206	539	-
East North Central division, total.....	36	368	2,059	314	623	1,576	3,767	4,849	472
Less than 0.29.....	8	30	126	30	60	126	938	1,029	92
0.30 to 0.39.....	3	54	376	41	85	221	961	1,264	80
0.40 to 0.69.....	16	143	694	136	271	584	1,107	1,389	170
0.80 and over.....	6	138	848	104	202	630	761	1,167	130
Undistributed <sup>2</sup> .....	3	3	15	3	5	15	-	-	-
West North Central division, total.....	26	116	484	99	176	376	2,567	3,034	387
Less than 0.29.....	9	30	101	27	39	77	1,732	1,787	234
0.30 to 0.39.....	5	22	78	20	39	74	241	277	36
0.40 to 0.69.....	3	23	65	20	37	55	157	235	51
0.70 and over.....	3	41	240	32	61	170	298	465	10
Undistributed <sup>2</sup> .....	6	-	-	-	-	-	139	270	56
East South Central division, total.....	17	111	427	100	193	352	1,505	2,652	553
Less than 0.29.....	3	34	129	34	74	129	844	1,576	472
0.30 to 0.49.....	3	26	84	24	44	69	215	260	38
0.50 and over.....	5	48	205	39	69	145	319	630	38
Undistributed <sup>2</sup> .....	6	3	9	3	6	9	127	196	5
INDUSTRY 1454.—FULLER'S EARTH									
United States, total.....	15	758	3,067	653	1,363	2,423	9,071	12,954	1,173
0.10 to 0.29.....	2	537	2,252	456	919	1,722	7,181	10,394	907
0.30 to 0.39.....	4								
0.40 to 0.49.....	2								
0.50 to 0.79.....	3								
Undistributed <sup>2</sup> .....	4	-	-	-	-	-	30	39	1
INDUSTRY 1455.—KAOLIN AND BALL CLAY									
United States, total.....	48	3,346	17,718	2,916	6,123	14,500	49,841	66,077	5,237
Less than 0.19.....	8	197	910	190	387	885	6,358	7,498	1,018
0.20 to 0.29.....	9	528	2,617	432	857	1,966	11,564	15,980	1,099
0.30 to 0.39.....	7	753	4,120	660	1,318	3,371	11,966	16,056	1,152
0.40 to 0.49.....	6	789	4,243	654	1,448	3,195	9,844	13,289	606
0.50 to 0.59.....	5	778	4,203	708	1,558	3,647	8,206	10,558	1,201
0.60 to 0.79.....	6	183	1,068	174	325	992	1,470	1,997	67
0.80 and over.....	3	78	383	63	148	295	422	655	79
Undistributed <sup>2</sup> .....	4	40	174	35	82	149	11	44	15

See footnotes at end of table.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining, by Geographic Areas: 1963—Continued

Ratio of payroll to value added in mining <sup>1</sup>	Establishments  (number)	All employees		Production, development, and exploration workers			Value added in mining  (\$1,000)	Value of shipments and receipts  (\$1,000)	Capital expendi- tures  (\$1,000)
		Total  (number)	Payroll  (\$1,000)	Total  (number)	Man-hours  (1,000)	Wages  (\$1,000)			
INDUSTRY 1455.—KAOLIN AND BALL CLAY—Continued									
South Central division, total.....	10	360	1,657	308	669	1,203	5,861	7,736	445
0.10 to 0.29.....	5	122	506	119	243	493	2,686	3,411	210
0.30 to 0.39.....	3	238	1,151	189	426	710	3,175	4,325	235
0.40 and over.....	2								
INDUSTRY 1456.—FELDSPAR									
United States, total.....	31	461	1,963	394	850	1,749	6,117	8,459	1,702
Less than 0.30.....	5	144	560	125	280	544	3,235	3,795	1,114
0.30 to 0.49.....	4	199	928	185	394	889	2,348	3,755	526
0.50 to 0.69.....	6	70	309	48	100	179	357	508	32
0.70 and over.....	7	41	139	30	64	111	164	382	30
Undistributed <sup>2</sup> .....	9	7	27	6	12	26	13	19	-
INDUSTRY 1459.—CLAY AND RELATED MINERALS, N.E.C.									
United States, total.....	130	1,961	10,688	1,679	3,577	8,507	24,481	38,944	2,992
Less than 0.19.....	3	18	62	16	30	56	408	316	102
0.20 to 0.29.....	14	302	1,517	254	559	1,173	5,943	7,650	309
0.30 to 0.39.....	22	518	3,228	440	877	2,527	9,416	13,131	452
0.40 to 0.49.....	10	213	959	179	344	752	2,139	3,233	372
0.50 to 0.59.....	16	321	1,588	289	653	1,374	2,948	5,564	289
0.60 to 0.69.....	11	255	1,430	216	506	1,097	2,239	4,205	213
0.70 to 0.99.....	10	163	942	137	283	754	1,121	2,043	131
1.00 and over.....	16	159	927	138	301	744	475	2,758	917
Undistributed <sup>2</sup> .....	28	12	35	10	24	30	( <sup>3</sup> )	44	207
East North Central division, total.....	12	259	1,500	241	557	1,390	3,375	5,826	270
Less than 0.29.....	4	69	415	61	149	364	1,583	2,065	124
0.30 to 0.49.....	4	56	198	48	95	153	481	564	89
0.70 and over.....	4	134	887	132	313	873	1,311	3,197	57
West North Central division, total.....	13	128	655	111	228	514	1,247	2,179	204
0.30 to 0.49.....	3	23	129	19	34	96	397	566	44
0.50 to 0.69.....	5	99	504	87	183	399	818	1,562	151
0.70 and over.....	2	6	22	5	11	19	32	51	9
Undistributed <sup>2</sup> .....	3								
South Atlantic division, total.....	16	457	1,950	382	808	1,430	4,356	6,652	995
Less than 0.29.....	5	162	744	125	261	476	3,038	3,689	172
0.30 to 0.49.....	3	57	159	50	74	131	364	512	68
0.50 to 0.69.....	6	238	1,047	207	474	823	954	2,451	755
1.00 and over.....	1								
Undistributed <sup>2</sup> .....	1								
East South Central division, total.....	13	97	519	80	186	358	1,128	2,025	154
0.30 to 0.49.....	2	88	488	72	169	331	1,058	1,937	142
0.50 to 0.69.....	3								
0.70 and over.....	2	9	31	8	17	27	70	88	12
Undistributed <sup>2</sup> .....	6								
West South Central division, total.....	23	243	1,297	216	515	1,064	3,081	4,795	316
Less than 0.29.....	5	66	329	61	154	298	1,360	1,819	80
0.30 to 0.49.....	5	55	252	47	112	194	593	839	134
0.50 to 0.69.....	6	103	647	90	211	506	1,032	1,809	61
0.70 and over.....	4	19	69	18	38	66	44	253	31
Undistributed <sup>2</sup> .....	3	-	-	-	-	-	52	75	10
Mountain division, total.....	24	360	2,186	303	601	1,781	5,826	8,600	292
Less than 0.39.....	6	199	1,384	169	344	1,112	4,546	6,317	45
0.40 to 0.99.....	8	130	680	108	202	563	1,158	1,946	112
1.00 and over.....	6	27	112	23	49	98	51	227	88
Undistributed <sup>2</sup> .....	6	4	10	3	6	8	71	110	35
Pacific division, total.....	19	256	1,570	213	397	1,212	3,967	5,723	419
0.30 to 0.49.....	6	207	1,307	174	317	1,026	3,384	4,714	213
0.50 to 0.69.....	4	10	32	10	16	32	52	81	2
0.70 and over.....	2	39	231	29	64	154	531	928	204
Undistributed <sup>2</sup> .....	7								

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>In computing these ratios contract employment serving the establishment is excluded. The cost of contract work expressed as a percent of payroll for 1963 was: for bentonite, 33 percent; for fire clay, 20 percent; for fuller's earth, 26 percent; for kaolin and ball clay, 4 percent; for feldspar, 31 percent; and for clay and related minerals, n.e.c., 11 percent.

<sup>2</sup>Represents establishments with zero or negative value added; establishments with no employees; and, for number of employees and payroll, figures for separately reported central offices and related facilities.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963

Industry and value added per employee <sup>1</sup>	Number of employees	Number of establishments with average employment of--							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1452.—BENTONITE									
Total.....	811	44	28	13	3	-	-	-	-
Less than \$3,000.....	64	4	4	-	-	-	-	-	-
\$3,000 to \$3,999.....		1	-	1	-	-	-	-	-
\$4,000 to \$4,999.....	60	1	1	-	-	-	-	-	-
\$6,000 to \$6,999.....		2	1	1	-	-	-	-	-
\$7,000 to \$7,999.....	97	2	-	2	-	-	-	-	-
\$8,000 to \$8,999.....		2	1	1	-	-	-	-	-
\$9,000 to \$9,999.....	66	3	2	1	-	-	-	-	-
\$10,000 to \$12,499.....	89	3	1	1	1	-	-	-	-
\$12,500 to \$14,999.....	160	4	1	2	1	-	-	-	-
\$15,000 to \$17,499.....	67	2	1	1	-	-	-	-	-
\$17,500 to \$19,999.....		2	1	1	-	-	-	-	-
\$20,000 and over.....	164	6	3	2	1	-	-	-	-
Undistributed <sup>2</sup> .....	44	12	12	-	-	-	-	-	-
INDUSTRY 1453.—FIRE CLAY									
Total.....	979	155	141	13	1	-	-	-	-
Less than \$3,000.....	30	11	11	-	-	-	-	-	-
\$3,000 to \$3,999.....	22	5	5	-	-	-	-	-	-
\$4,000 to \$4,999.....	15	6	6	-	-	-	-	-	-
\$5,000 to \$5,999.....	153	10	8	1	1	-	-	-	-
\$6,000 to \$6,999.....	51	6	6	-	-	-	-	-	-
\$7,000 to \$7,999.....	152	13	11	2	-	-	-	-	-
\$8,000 to \$8,999.....	67	12	12	-	-	-	-	-	-
\$9,000 to \$9,999.....	118	11	7	4	-	-	-	-	-
\$10,000 to \$12,499.....	113	19	18	1	-	-	-	-	-
\$12,500 to \$14,999.....	39	6	5	1	-	-	-	-	-
\$15,000 to \$17,499.....	15	3	3	-	-	-	-	-	-
\$17,500 to \$19,999.....	14	3	3	-	-	-	-	-	-
\$20,000 and over.....	155	22	19	3	-	-	-	-	-
Undistributed <sup>2</sup> .....	35	28	27	1	-	-	-	-	-
INDUSTRY 1454.—FULLER'S EARTH									
Total.....	758	15	6	4	3	1	1	-	-
\$6,000 to \$6,999.....	100	3	1	1	1	-	-	-	-
\$8,000 to \$8,999.....		3	1	1	-	1	-	-	-
\$10,000 to \$12,499.....	243	1	-	-	1	-	-	-	-
\$12,500 to \$14,999.....		3	1	1	-	-	1	-	-
\$20,000 and over.....	415	1	-	-	1	-	-	-	-
Undistributed <sup>2</sup> .....	-	4	3	1	-	-	-	-	-
INDUSTRY 1455.—KAOLIN AND BALL CLAY									
Total.....	3,346	48	20	15	5	4	3	1	-
Less than \$3,000.....	56	3	3	-	-	-	-	-	-
\$5,000 to \$5,999.....		1	-	1	-	-	-	-	-
\$6,000 to \$6,999.....	109	5	2	3	-	-	-	-	-
\$7,000 to \$7,999.....	137	3	1	1	-	1	-	-	-
\$8,000 to \$8,999.....	168	3	1	1	-	1	-	-	-
\$9,000 to \$9,999.....	148	3	1	-	2	-	-	-	-
\$10,000 to \$12,499.....	711	5	2	1	-	1	1	-	-
\$12,500 to \$14,999.....	885	6	-	2	2	1	-	1	-
\$15,000 to \$17,499.....	546	1	1	-	-	-	-	-	-
\$17,500 to \$19,999.....		7	2	4	-	-	1	-	-
\$20,000 and over.....	565	8	5	1	1	-	1	-	-
Undistributed <sup>2</sup> .....	21	3	2	-	-	-	-	-	-
INDUSTRY 1456.—FELDSPAR									
Total.....	461	31	21	9	1	-	-	-	-
Less than \$3,000.....	20	6	6	-	-	-	-	-	-
\$4,000 to \$4,999.....	47	4	3	1	-	-	-	-	-
\$5,000 to \$5,999.....	28	3	3	-	-	-	-	-	-
\$6,000 to \$6,999.....	104	1	-	1	-	-	-	-	-
\$8,000 to \$8,999.....		1	1	-	-	-	-	-	-
\$9,000 to \$9,999.....	146	2	-	2	-	-	-	-	-
\$10,000 to \$12,499.....		2	1	1	-	-	-	-	-
\$12,500 to \$14,999.....	116	2	-	1	1	-	-	-	-
\$15,000 to \$17,499.....		2	-	2	-	-	-	-	-
\$20,000 and over.....	116	2	1	1	-	-	-	-	-
Undistributed <sup>2</sup> .....		6	6	-	-	-	-	-	-

See footnotes at end of table.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963—Continued

Industry and value added per employee <sup>1</sup>	Number of employees	Number of establishments with average employment of--							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1459.—CLAY AND RELATED MINERALS, N.E.C.									
Total.....	1,961	130	96	28	4	2	-	-	-
Less than \$3,000.....	79	15	14	1	-	-	-	-	-
\$3,000 to \$3,999.....	84	4	2	2	-	-	-	-	-
\$4,000 to \$4,999.....	105	7	4	3	-	-	-	-	-
\$5,000 to \$5,999.....	53	7	7	-	-	-	-	-	-
\$6,000 to \$6,999.....	47	3	1	2	-	-	-	-	-
\$7,000 to \$7,999.....	75	10	9	1	-	-	-	-	-
\$8,000 to \$8,999.....	277	11	6	3	2	-	-	-	-
\$9,000 to \$9,999.....	204	11	7	4	-	-	-	-	-
\$10,000 to \$12,499.....	162	8	5	3	-	-	-	-	-
\$12,500 to \$14,999.....	297	6	2	1	2	1	-	-	-
\$15,000 to \$17,499.....	2	2	2	-	-	-	-	-	-
\$17,500 to \$19,999.....	174 { 7	7	5	2	-	-	-	-	-
\$20,000 and over.....	392	11	4	6	-	1	-	-	-
Undistributed <sup>2</sup> .....	12	28	28	-	-	-	-	-	-

Standard Notes: - Represents zero.  
n.e.c. Not elsewhere classified.

(D) Withheld to avoid disclosing figures of individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>In computing these ratios contract employment serving the establishment is excluded. The cost of contract work expressed as a percent of payroll in 1963 was: For bentonite, 33 percent; for fire clay, 20 percent; for fuller's earth, 26 percent; for kaolin and ball clay, 4 percent; for feldspar, 31 percent; and for clay and related minerals, n.e.c., 11 percent.

<sup>2</sup>Represents establishments with no employees or with negative value added in mining, and, for number of employees, figures for separately reported central offices and related facilities.

TABLE 11. **Hourly Earnings of Production, Development, and Exploration Workers for Establishments with 10 or More Employees, by Geographic Areas: 1963**

Industry by hourly earnings classes	Number of employees	Number of establishments with 10 or more employees in--									
		Total	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
INDUSTRY 1452.--BENTONITE											
Total.....	779	25	-	-	-	2	-	6	4	10	3
\$1.00 to \$1.49.....	148	5	-	-	-	-	-	2	3	-	-
\$1.50 to \$1.99.....	178	5	-	-	-	1	-	2	1	1	-
\$2.00 to \$2.49.....	302	10	-	-	-	1	-	2	-	7	-
\$2.50 to \$2.99.....	151	3	-	-	-	-	-	-	-	2	1
\$3.00 to \$3.49.....		1	-	-	-	-	-	-	-	-	1
\$4.50 and over.....		1	-	-	-	-	-	-	-	-	1
INDUSTRY 1453.--FIRE CLAY											
Total.....	625	29	-	8	9	3	-	6	-	1	2
Less than \$1.00.....	45	1	-	-	-	1	-	-	-	-	-
\$1.00 to \$1.49.....		2	-	-	-	1	-	1	-	-	-
\$1.50 to \$1.99.....	91	5	-	1	-	-	-	3	-	-	1
\$2.00 to \$2.49.....	171	9	-	3	4	-	-	1	-	1	-
\$2.50 to \$2.99.....	161	8	-	4	2	1	-	1	-	-	-
\$3.00 to \$3.49.....	157	3	-	-	2	-	-	-	-	-	1
\$3.50 to \$3.99.....		1	-	-	1	-	-	-	-	-	-
INDUSTRY 1454.--FULLER'S EARTH											
Total.....	(D)	9	-	-	-	-	8	1	-	-	-
\$1.00 to \$1.49.....	(D)	4	-	-	-	-	3	1	-	-	-
\$1.50 to \$1.99.....		5	-	-	-	-	4	-	-	-	-
\$2.00 to \$2.49.....	512	1	-	-	-	-	1	-	-	-	-
INDUSTRY 1455.--KAOLIN AND BALL CLAY											
Total.....	3,314	38	1	1	-	-	22	9	1	2	2
Less than \$1.00.....	154	1	-	-	-	-	1	-	-	-	-
\$1.00 to \$1.49.....		5	-	-	-	-	2	2	-	-	1
\$1.50 to \$1.99.....	549	12	1	-	-	-	4	6	-	-	1
\$2.00 to \$2.49.....	1,453	10	-	1	-	-	9	-	-	-	-
\$2.50 to \$2.99.....	580	5	-	-	-	-	3	1	1	-	-
\$3.00 to \$3.49.....	578	4	-	-	-	-	3	-	-	1	-
\$3.50 to \$3.99.....		1	-	-	-	-	-	-	-	1	-
INDUSTRY 1456.--FELDSPAR											
Total.....	(D)	11	3	-	-	1	6	-	-	-	1
\$1.00 to \$1.49.....	238	1	-	-	-	-	1	-	-	-	-
\$1.50 to \$1.99.....		6	1	-	-	1	4	-	-	-	-
\$2.00 to \$2.49.....	(D)	1	1	-	-	-	-	-	-	-	-
\$2.50 to \$2.99.....		2	1	-	-	-	1	-	-	-	-
\$3.00 to \$3.49.....		1	-	-	-	-	-	-	-	-	1
INDUSTRY 1459.--CLAY AND RELATED MINERALS, N.E.C.											
Total.....	1,825	58	1	5	7	5	14	4	8	8	6
Less than \$1.00.....	158	1	-	-	-	-	1	-	-	-	-
\$1.00 to \$1.49.....		4	-	-	-	-	1	2	1	-	-
\$1.50 to \$1.99.....	510	18	-	2	2	1	7	1	4	-	1
\$2.00 to \$2.49.....	298	15	1	-	2	2	4	-	2	3	1
\$2.50 to \$2.99.....	495	13	-	2	2	1	1	1	1	3	2
\$3.00 to \$3.49.....	263	4	-	-	-	1	-	-	-	2	1
\$3.50 to \$3.99.....	101	2	-	1	1	-	-	-	-	-	-
\$4.00 to \$4.49.....		1	-	-	-	-	-	-	-	-	-

Standard Notes: - Represents zero.  
n.e.c. Not elsewhere classified.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.



TABLE 12. Distribution of Operating Companies, by Employment Size and by Number of Establishments: 1963

Industry by establishment count	Number of--		Number of establishments with average employment of--									
	Operating companies	Employees	Total	1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1452.—BENTONITE												
Total.....	31	811	44	13	3	12	13	3	-	-	-	-
Multiunit companies, total.....	10	674	23	1	2	8	9	3	-	-	-	-
1 establishment <sup>1</sup> .....	3	93	3	-	-	-	3	-	-	-	-	-
2 establishments.....	3	196	6	-	1	3	1	1	-	-	-	-
3 or 4 establishments.....	3	358	9	1	-	5	3	-	-	-	-	-
5 or 6 establishments.....	1		5	-	1	-	2	2	-	-	-	-
Single unit companies.....	21	164	21	12	1	4	4	-	-	-	-	-
INDUSTRY 1453.—FIRE CLAY												
Total.....	134	979	155	100	27	15	12	1	-	-	-	-
Multiunit companies, total.....	21	419	42	20	11	5	5	1	-	-	-	-
1 establishment <sup>1</sup> .....	17	268	17	7	4	1	4	1	-	-	-	-
2 establishments.....	2		7	5	1	1	-	-	-	-	-	-
3 or 4 establishments.....	1	151	6	1	2	2	1	-	-	-	-	-
5 or 6 establishments.....	1		12	7	4	1	-	-	-	-	-	-
10 to 14 establishments.....	1											
Single unit companies.....	113	560	113	80	16	10	7	-	-	-	-	-
INDUSTRY 1454.—FULLER'S EARTH												
Total.....	15	758	15	4	-	2	3	3	3	1	1	-
Multiunit companies, total.....	8	671	8	1	-	-	-	3	2	1	1	-
1 establishment <sup>1</sup> .....	8	671	8	1	-	-	-	3	2	1	1	-
Single unit companies.....	7	87	7	3	-	2	3	-	1	-	-	-
INDUSTRY 1455.—KAOLIN AND BALL CLAY												
Total.....	39	3,346	48	7	3	10	15	5	4	3	1	-
Multiunit companies, total.....	19	2,747	28	3	2	7	7	1	4	3	1	-
1 establishment <sup>1</sup> .....	15	1,696	15	3	1	5	1	-	2	2	1	-
2 establishments.....	2	1,051	4	-	-	-	1	-	2	1	-	-
3 or 4 establishments.....	1		4	-	-	1	2	1	-	-	-	-
5 or 6 establishments.....	1		5	-	1	1	3	-	-	-	-	-
Single unit companies.....	20	599	20	4	1	3	8	4	-	-	-	-
INDUSTRY 1456.—FELDSPAR												
Total.....	24	461	31	16	4	1	9	1	-	-	-	-
Multiunit companies, total.....	6	363	13	4	-	-	8	1	-	-	-	-
1 establishment <sup>1</sup> .....	3	77	3	1	-	-	2	-	-	-	-	-
3 or 4 establishments.....	3	286	10	3	-	-	6	1	-	-	-	-
Single unit companies.....	18	98	18	12	4	1	1	-	-	-	-	-
INDUSTRY 1459.—CLAY AND RELATED MINERALS, N.E.C.												
Total.....	115	1,961	130	61	11	24	28	4	2	-	-	-
Multiunit companies, total.....	30	1,324	45	5	4	10	22	2	2	-	-	-
1 establishment <sup>1</sup> .....	20	636	20	2	3	3	10	1	1	-	-	-
2 establishments.....	7	513	14	-	1	3	8	1	1	-	-	-
3 or 4 establishments.....	2	175	6	-	-	2	4	-	-	-	-	-
5 or 6 establishments.....	1		5	3	-	2	-	-	-	-	-	-
Single unit companies.....	85	639	85	56	7	14	6	2	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.  
<sup>1</sup>Represents companies having at least one establishment classified in other industries.

## CHEMICAL AND FERTILIZER MINERAL MINING

This report shows 1963 Census of Mineral Industries statistics for establishments classified in Industry Group 147, Chemical and Fertilizer Mineral Mining. The separate industries included in this group are as follows:

### SIC Code and Title

- 1472—Barite
- 1473—Fluorspar
- 1474—Potash, Soda, and Borate Minerals
- 1475—Phosphate Rock
- 1476—Rock Salt
- 1477—Sulfur
- 1479—Chemical and Fertilizer Mineral Mining, Not Elsewhere Classified

### INDUSTRY DESCRIPTIONS

Industry 1472—Barite. This industry represents establishments primarily engaged in mining, milling, grinding, or otherwise preparing crude barite. Establishments engaged in grinding barite which do not include a mine are classified in manufacturing industry 3295, Minerals and Earths, Ground or Otherwise Treated. About one-half of all ground barite produced in 1963 was prepared at such establishments.

Industry 1473—Fluorspar. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing fluorspar.

Industry 1474—Potash, Soda, and Borate Minerals. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing natural potassium, sodium, or boron compounds (other than common salt). Products of the industry include potash salts, sodium borates (borax, kernite, ulexite), sodium carbonates (soda ash, trona), sodium sulfates (principally Glauber's salt), and colemanite, a calcium borate. Dry-lake brine operations are included in this industry as well as establishments engaged in producing the specified minerals from underground and open-pit mines.

Industry 1475—Phosphate Rock. This industry represents establishments primarily engaged in mining, milling, drying, or otherwise preparing phosphate rock, including apatite. Establishments primarily engaged in the production of phosphoric acid, superphosphates, or other manufactured phosphate compounds or chemicals are classified in Major Group 28, Chemicals and Allied Products.

Industry 1476—Rock Salt. This industry represents establishments primarily engaged in mining, crushing, and screening rock salt. Establishments primarily engaged in manufacturing edible salt from rock salt and from natural or artificial brines are classified in manufacturing industry 2899, Chemicals and Chemical Preparations, N.E.C. In 1963, 4,632 thousand short tons of evaporated salt, valued at \$98,368 thousand, were shipped, mostly by establishments in this manufacturing industry; as compared with 8,769 thousand short tons, valued at \$58,207 thousand, for net shipments of rock salt,

mostly by establishments in the Rock Salt Industry. Another source of salt is brine produced and used as such. Separate census statistics for salt from this source are not available since such brine salts are usually produced and consumed by the same manufacturing plant in the production of chemicals and other manufactured products. According to the Bureau of Mines, salt in brine accounted for 57 percent of the total quantity of all kinds of salt sold or used by producers in 1963.

Industry 1477—Sulfur. This industry represents establishments primarily engaged in mining native sulfur, including the extraction of native sulfur at well operations and mining and beneficiating sulfur ore. The mining of pyrites for sulfur is included in industry 1479, Chemical and Fertilizer Mineral Mining, N.E.C. The recovery of sulfur from beneficiation of natural gas is included in the manufacturing industry 2819, Inorganic Chemicals, N.E.C.

Industry 1479—Chemical and Fertilizer Mineral Mining, N.E.C. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing chemical or fertilizer mineral raw materials, n.e.c., such as arsenic minerals, guano, lithium minerals, mineral pigments, pyrites, and strontium minerals.

#### SUMMARY OF FINDINGS

The total value of shipments and receipts of the Chemical and Fertilizer Mineral Mining Industries in 1963 was \$577 million, of which primary products of these industries amounted to about \$522 million and secondary products, products purchased and resold without further processing, and receipts for services amounted to about \$15 million. Of the total value of shipments for this group, the Barite Industry accounted for \$17 million; the Fluorspar Industry, \$16 million; the Potash, Soda, and Borate Minerals Industry, \$192 million; the Phosphate Rock Industry, \$162 million; the Rock Salt Industry, \$59 million; the Sulfur Industry, \$113 million; and the Chemical and Fertilizer Mineral Mining, N.E.C., Industry, \$18 million.

These figures represent gross value of shipments and some of them contain duplication due to the inclusion of the value of minerals transferred from one establishment to other establishments in the same industry for preparation. For the group as a whole, the cost of minerals transferred to other establishments for preparation amounted to about \$39 million, or 7 percent of the gross value of shipments of all industries in this group. For the Sulfur Industry, no receipts of minerals for preparation were reported. For the Barite; Potash, Soda, and Borate Minerals; Rock Salt; and Chemical and Fertilizer Mineral Mining, N.E.C., Industries, transfers of minerals for preparation amounted to less than 5 percent of the gross value of shipments of the industries. For the Fluorspar Industry, the cost of minerals received for preparation amounted to about \$3.3 million, or 21 percent of the gross value of shipments. For the Phosphate Rock Industry, the cost of minerals transferred for preparation totaled \$31.4 million, or 19 percent of the gross value of shipments. Separate figures on gross and net shipments are shown in tables 1, 3, and 5 of this report.

The production index for the primary products of all industries in the Chemical and Fertilizer Mineral Mining Group increased to 131 in 1963 from the 1958 level of 105. The unit value index for 1963 was 96 compared to 98 in 1958. Both indexes were computed on a base of 1954 = 100. The 1963 production and unit value indexes, respectively, for primary products of selected industries in this group were for barite, 92 and 99; for fluorspar, 91 and 86; for potash, soda, and borate minerals, 171 and 103; for phosphate rock (net shipments), 144 and 96; for rock salt 180 and 98; and for sulfur 85 and 90.

The general statistics (employment, payrolls, value of shipments, cost of supplies, etc.) are reported for each establishment as a whole. Aggregates of such data for an industry reflect not only the primary activities of the establishments in the industry, but also their

activities in the production of secondary products, and in the performance of contract work for others. This fact should be taken into account in comparing industry statistics (tables 1 to 4 and 7 to 12) with product statistics (table 6) showing shipments by all industries of the primary products of the specified industry. The extent of the "product mix" is indicated in table 5 which shows the value of primary and secondary products shipped by establishments classified in the specified industry and also the value of net shipments of primary products of the industry produced as secondary products by establishments classified in other industries.

#### COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the chemical and fertilizer minerals industries are, in general, comparable with product statistics for the same commodities published by the Bureau of Mines. The differences which occur result primarily from differences in data collection methods, coverage, and objectives sought. The most nearly comparable statistics from the two bureaus are shown in the table below. Major reasons for the differences in the product statistics are as follows:

1. The Bureau of the Census collects information on production and shipments and calculates net shipments whereas the Bureau of Mines generally obtains figures on products sold or used.
2. The Bureau of the Census excludes small establishments whose value of products and reported costs were below \$500. The Bureau of Mines includes all reports obtained regardless of size. However, the contribution to products of such establishments which the Census Bureau excludes is usually small.
3. Differences exist in coverage in certain areas for both collecting agencies.
4. Census Bureau figures are sometimes reported at a different level of preparation from Bureau of Mines figures. In general, the Census Bureau uses a uniform approach to crude and prepared material, requesting for crude the total material actually loaded at the mine site, and under prepared material, the product of all preparation methods such as milling, washing, grinding, or sizing. These factors are the principal explanation for the differences for barite, where the Bureau of Mines figure shown below as crude barite includes some material prepared sufficiently to be marketable, and where Census Bureau figures may include under prepared barite some material which was washed only and which may have been further prepared by another establishment in the same industry.

## 1963 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Unit of measure	Bureau of the Census statistics			Bureau of Mines statistics		
		Pro- duction	Shipments including interplant transfers		Pro- duction	Shipments	
			Quantity	Value (\$1,000)		Quan- tity	Value (\$1,000)
		(quantity)			(quan- tity)		
Barite:							
Crude barite.....	1,000 shorttons	1,088	268	3,589	<sup>1</sup> 803	(NA)	(NA)
Prepared barite...	...do.....	(NA)	1,147	28,445	<sup>2</sup> 1,027	<sup>2</sup> 1,030	<sup>2</sup> 25,517
Net shipments by the barite industry.....	...do.....	(X)	<sup>3</sup> 832	<sup>3</sup> 16,392	(X)	<sup>4</sup> 824	<sup>4</sup> 9,402
Fluorspar:							
Production and shipments:							
Crude fluorspar.	...do.....	595	116	906	586	(NA)	(NA)
Prepared fluorspar.....	...do.....	<sup>5</sup> 296	<sup>5</sup> 293	<sup>5</sup> 12,471	188	(NA)	(NA)
Net shipments...	...do.....	(X)	( <sup>6</sup> )	10,038	(X)	200	9,001
Crude fluorspar prepared.....	...do.....	<sup>5</sup> 716	(NA)	(NA)	586	(NA)	(NA)
Potash, soda, and borate minerals:							
Potassium salts:							
Crude salts.....	...do.....	16,714	} <sup>7</sup> 4,608	<sup>7</sup> 104,209	{ <sup>8</sup> 4,871	(NA)	(NA)
Processed or refined salts..	...do.....	4,515				(NA)	<sup>9</sup> 109,276
Sodium carbonates.	...do.....	(NA)	1,107	26,595	(NA)	<sup>4</sup> 1,119	<sup>4</sup> 27,616
Sodium sulfates...	...do.....	(NA)	432	8,778	(NA)	<sup>4</sup> 435	<sup>4</sup> 8,392
Boron compounds...	...do.....	(NA)	<sup>3</sup> 723	<sup>3</sup> 46,942	(NA)	<sup>4</sup> 700	<sup>4</sup> 54,981
Phosphate rock:							
Crude ore or matrix.....	1,000 long tons	63,403	3,703	10,897	61,598	(NA)	(NA)
Washed or concentrated.....	...do.....	18,006	10,218	43,396	16,794	(NA)	(NA)
Dried, calcined, or sintered.....	...do.....	16,936	16,948	107,365	15,164	(NA)	(NA)
Net shipments.....	...do.....	(X)	{ <sup>3</sup> 22,044 <sup>10</sup> 20,843	{ <sup>3</sup> 128,035 <sup>10</sup> 130,295	(X)	<sup>4</sup> 19,860	<sup>4</sup> 140,642
Rock salt.....	1,000 short tons	(NA)	<sup>3</sup> 8,769	<sup>3</sup> 58,207	(NA)	<sup>4</sup> 8,345	<sup>4</sup> 51,648
Native sulfur and sulfur ore.....	1,000 long tons	4,883	4,923	113,091	4,883	4,996	99,029
Frasch process sulfur.....	...do.....	4,882	4,922	113,076	4,882	4,995	99,014
Sulfur ore.....	...do.....	1	1	15	1	1	15

(NA) Not available. (X) Not applicable. <sup>1</sup>Represents mine or plant output of primary barite. <sup>2</sup>Represents crushed and ground barite sold by producers. <sup>3</sup>Represents gross shipments less receipts from other establishments for preparation. <sup>4</sup>Represents minerals sold or used by producers. <sup>5</sup>Includes foreign ores prepared in the United States. <sup>6</sup>Not shown, since a significant tonnage cannot be computed by the only method available: subtraction of minerals received for preparation from the gross tonnage shipped, with both of these tonnages including large quantities of foreign ores. <sup>7</sup>Represents net shipments obtained from gross shipments of crude and processed or refined salts by subtracting shipments of crude salts to other establishments for processing or refining. <sup>8</sup>Represents production of marketable potassium salts and probably includes some marketable

# CHEMICAL AND FERTILIZER MINERALS

Distribution of Employment by State: 1963



## Employment: 1840-1963

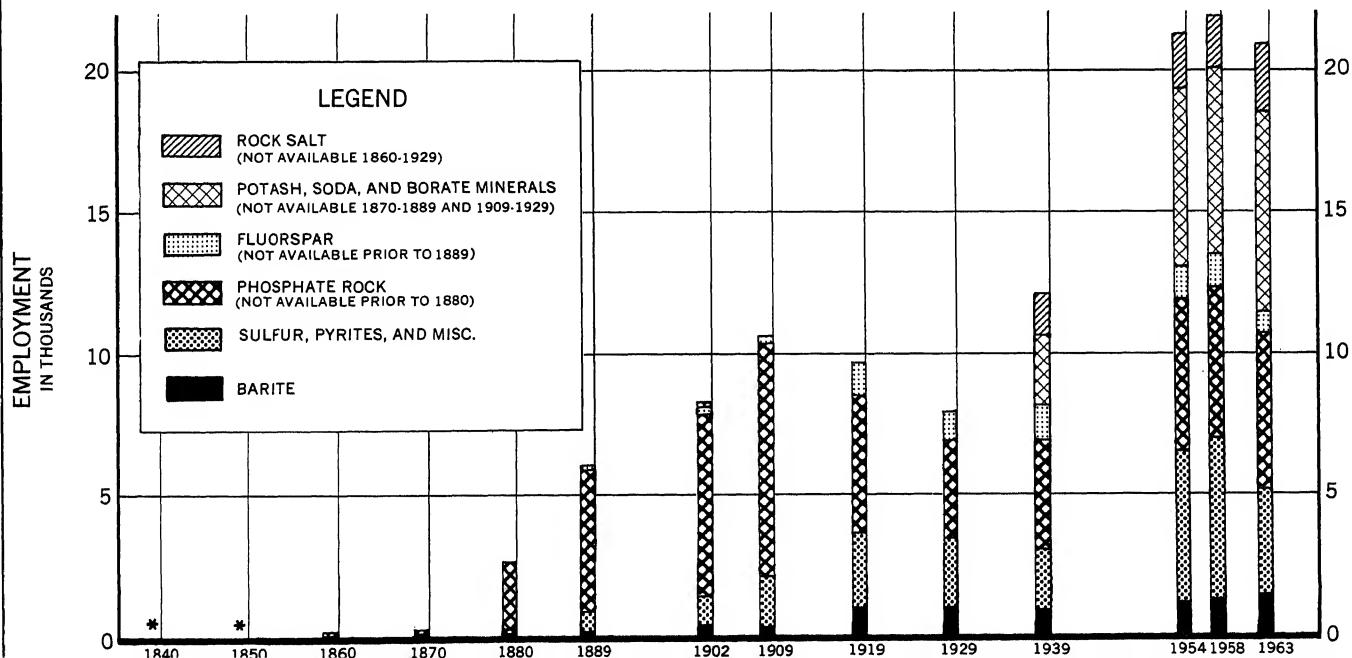


TABLE 1. General Statistics: 1963 and Earlier Years

Year	Operating companies  (number)	Establishments		All employees		Production, development, and exploration workers			Value added in mining  (\$1,000)	Cost of supplies, minerals received for preparation, fuels, purchased electric energy, and contract work  (\$1,000)	Cost of purchased machinery installed  (\$1,000)	Value of shipments and receipts  (\$1,000)	Value of net ship- ments and receipts  (\$1,000)	Quantity of primary products <sup>1</sup>  (1,000 tons)	Capital expendi- tures  (\$1,000)	Horse- power rating of power equip- ment  (1,000 hp)
		Total  (number)	With 20 employ- ees or more (number)	Total  (number)	Payroll  (\$1,000)	Total  (number)	Man-hours  (1,000)	Wages  (\$1,000)								
GROUP 147.—CHEMICAL AND FERTILIZER MINERALS																
1963.....	177	235	106	21,040	137,108	14,595	31,213	85,678	433,313	169,763	33,849	576,904	536,840	(X)	60,021	1,235
1958 <sup>1</sup> .....	201	264	102	21,899	120,611	15,881	31,031	78,306	337,312	149,283	23,405	470,729	433,589	(X)	39,271	(NA)
1954 <sup>2</sup> .....	232	303	110	21,421	98,386	17,142	36,119	72,591	337,117	125,240	23,678	450,769	411,854	(X)	35,266	928
1939 <sup>2</sup> .....	<sup>3</sup> 176	<sup>4</sup> 197	(NA)	12,231	17,270	10,586	21,062	12,230	61,682	<sup>5</sup> 12,407	(NA)	(NA)	74,089	(X)	(NA)	275
INDUSTRY 1472.—BARITE																
1963.....	45	54	13	1,434	6,799	911	1,887	3,605	11,107	5,920	742	16,668	16,536	832	1,101	60
1958.....	41	53	8	1,227	5,177	781	1,588	2,698	11,321	3,169	251	13,768	<sup>6</sup> 13,434	603	973	(NA)
1954.....	36	44	11	1,125	3,874	1,036	2,403	3,451	14,051	3,980	1,250	18,269	18,269	903	1,012	68
1939.....	37	<sup>4</sup> 47	(NA)	854	752	792	1,439	597	1,652	<sup>5</sup> 413	(NA)	(NA)	2,065	348	(NA)	10
1929 <sup>2</sup> .....	(NA)	<sup>4</sup> 44	(NA)	915	834	844	(NA)	648	1,489	<sup>5</sup> 313	154	(NA)	1,802	272	(NA)	6
1919 <sup>2</sup> .....	(NA)	89	(NA)	978	879	919	(NA)	769	1,276	316	(NA)	1,592	1,574	(NA)	(NA)	3
1909.....	23	<sup>4</sup> 42	(NA)	259	110	240	(NA)	90	183	42	(NA)	225	225	(NA)	(NA)	(Z)
1902.....	42	<sup>4</sup> 49	(NA)	364	145	<sup>7</sup> 336	(NA)	130	194	<sup>5</sup> 9	(NA)	(NA)	203	62	(NA)	(Z)
1889.....	(NA)	(NA)	(NA)	215	55	204	(NA)	(NA)	98	8	(NA)	(NA)	106	21	(NA)	(NA)
1880 <sup>3</sup> .....	(NA)	<sup>4</sup> 6	(NA)	63	8	(NA)	(NA)	(NA)	37	-	(NA)	(NA)	37	4	(NA)	(NA)
INDUSTRY 1473.—FLUORSPAR																
1963.....	28	30	7	804	3,981	682	1,346	3,037	8,869	6,968	268	15,792	12,340	595	313	24
1958.....	50	55	11	1,235	5,616	1,044	2,105	4,336	12,653	8,126	764	19,977	16,639	836	1,566	(NA)
1954.....	94	104	15	1,260	4,866	997	2,001	3,451	9,914	5,735	561	15,461	13,733	656	749	49
1939 <sup>2</sup> .....	60	<sup>4</sup> 61	(NA)	1,396	1,362	1,287	2,568	1,134	2,655	<sup>5</sup> 742	(NA)	(NA)	3,397	306	(NA)	21
1929 <sup>2</sup> .....	(NA)	28	(NA)	1,171	1,402	1,053	(NA)	1,112	2,038	<sup>5</sup> 820	140	(NA)	2,858	156	(NA)	7
1919.....	(NA)	54	(NA)	1,243	1,491	1,124	(NA)	1,196	2,392	943	(NA)	3,335	3,335	(NA)	(NA)	7
1909.....	16	<sup>4</sup> 18	(NA)	323	196	296	(NA)	170	228	61	(NA)	289	289	(NA)	(NA)	1
1902.....	18	<sup>4</sup> 22	(NA)	311	137	<sup>7</sup> 269	(NA)	110	245	<sup>5</sup> 31	(NA)	(NA)	276	49	(NA)	1
1889.....	(NA)	(NA)	(NA)	101	14	97	(NA)	(NA)	41	5	(NA)	(NA)	46	10	(NA)	(NA)
INDUSTRY 1474.—POTASH, SODA, AND BORATE MINERALS																
1963.....	19	23	16	7,050	51,859	4,822	9,849	32,901	156,151	50,959	11,779	192,116	(D)	6,870	26,773	330
1958.....	18	21	14	6,661	41,067	4,590	9,212	26,746	111,082	34,490	6,936	141,115	(D)	<sup>5</sup> 5,544	11,393	(NA)
1954.....	15	20	13	6,322	33,439	4,738	9,381	23,028	82,213	26,210	8,390	107,757	(D)	4,606	9,056	195
1939 <sup>2</sup> .....	15	<sup>4</sup> 17	(NA)	2,438	4,756	2,049	4,388	3,445	13,330	<sup>5</sup> 3,701	(NA)	(NA)	17,031	787	(NA)	61
1902.....	6	<sup>4</sup> 6	(NA)	167	133	<sup>7</sup> 153	(NA)	115	2,170	<sup>5</sup> 214	(NA)	(NA)	2,384	19	(NA)	(Z)
INDUSTRY 1475.—PHOSPHATE ROCK																
1963.....	43	66	39	5,624	31,955	3,996	9,047	20,642	94,889	74,099	14,904	161,658	130,295	20,843	22,234	525
1958.....	43	65	37	5,393	27,210	3,955	8,255	17,185	64,375	67,326	6,095	132,094	99,109	15,605	5,702	(NA)
1954.....	53	75	39	5,440	21,529	4,579	10,119	17,089	62,089	59,069	8,156	117,976	82,583	13,386	11,338	357
1939 <sup>2</sup> .....	33	<sup>4</sup> 40	(NA)	3,754	3,729	3,372	6,680	2,871	9,003	<sup>5</sup> 3,283	(NA)	(NA)	12,286	3,958	(NA)	113
1935.....	(NA)	(NA)	(NA)	2,912	2,457	2,638	(NA)	1,807	8,442	<sup>5</sup> 2,981	(NA)	(NA)	11,423	(NA)	(NA)	(NA)
1929.....	(NA)	26	(NA)	3,506	4,082	3,201	(NA)	3,304	9,497	<sup>5</sup> 3,547	805	(NA)	13,044	3,829	(NA)	104
1919 <sup>2</sup> .....	(NA)	48	(NA)	4,747	4,662	4,373	(NA)	3,901	6,155	4,145	(NA)	10,300	10,300	1,989	(NA)	50
1909.....	56	76	(NA)	8,301	3,836	7,923	(NA)	3,240	8,265	2,516	(NA)	10,781	10,781	(NA)	(NA)	51
1902.....	87	<sup>4</sup> 115	(NA)	6,362	2,285	<sup>5</sup> 5,971	(NA)	1,930	3,967	<sup>5</sup> 956	(NA)	(NA)	4,923	1,549	(NA)	14
1889.....	(NA)	(NA)	(NA)	5,011	1,209	4,901	(NA)	(NA)	2,505	433	(NA)	(NA)	2,938	550	(NA)	(Z)
1880.....	(NA)	21	(NA)	2,475	470	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	1,124	211	(NA)	(NA)
INDUSTRY 1476.—ROCK SALT																
1963.....	20	25	15	2,443	15,955	1,812	4,260	11,142	49,539	12,001	5,158	59,297	58,630	<sup>10</sup> 8,769	7,401	106
1958.....	18	22	12	1,984	10,996	1,602	3,508	7,937	34,073	8,222	2,125	41,813	(D)	<sup>10</sup> 5,445	2,607	(NA)
1954.....	11	15	12	1,925	8,571	1,659	3,861	7,117	30,013	6,297	1,534	35,658	35,581	4,618	2,186	48
1939.....	17	<sup>4</sup> 17	(NA)	1,561	1,974	1,380	2,608	1,434	5,721	<sup>5</sup> 1,175	(NA)	(NA)	6,896	2,047	(NA)	23
INDUSTRY 1477.—SULFUR																
1963.....	11	17	10	2,603	20,597	1,600	3,264	10,578	100,349	13,041	799	113,103	113,103	4,923	1,086	151
1958.....	14	24	13	3,677	24,570	2,303	4,644	13,267	94,063	21,344	7,077	106,202	106,202	4,619	16,282	(NA)
1954.....	12	20	13	4,095	21,186	3,077	6,229	14,619	124,166	22,561	2,803	140,685	140,685	5,510	8,845	159
1939 <sup>2</sup> .....	8	<sup>4</sup> 10	(NA)	2,024	4,456	1,517	3,031	2,545	28,863	<sup>5</sup> 2,949	(NA)	(NA)	31,812	2,091	(NA)	45
1929 <sup>2</sup> .....	(NA)	9	(NA)	2,504	4,438	2,199	(NA)	3,483	29,302	<sup>5</sup> 7,824	1,634	(NA)	37,126	2,328	(NA)	34
1919 <sup>2</sup> .....	(NA)	4	(NA)	1,273	2,095	1,129	(NA)	1,682	13,720	4,216	(NA)	17,936	17,936	(NA)	(NA)	15
1909.....	4	4	(NA)	418	435	366	(NA)	325	3,476	956	(NA)	4,432	4,432	(NA)	(NA)	3
1902 <sup>2</sup> .....	18	<sup>4</sup> 23	(NA)	1,024	449	<sup>7</sup> 970	(NA)	399	726	<sup>5</sup> 221	(NA)	(NA)	947	196	(NA)	6
INDUSTRY 1479.—CHEMICAL AND FERTILIZER MINING, N.E.C.																
1963.....	19	20	6	1,082	5,962	772	1,560	3,773	12,409	6,775	199	18,270	(D)	(X)	1,113	39
1958 <sup>1</sup> .....	22	24	7	2,020	7,750	1,606	2,619	6,137	9,745	6,606	157	15,760	(D)	(X)	748	(NA)
1954 <sup>2</sup> .....	25	27	7	1,254	4,921	1,056	2,125	3,836	14,671	1,388	984	14,963	(D)	(X)	2,080	43
1919 <sup>2</sup> .....	(NA)	40	(NA)	1,478	1,784	1,357	(NA)	1,559	1,850	1,040	(NA)	2,890	2,890	(X)	(NA)	7
1909 <sup>2</sup> .....	<sup>3</sup> 34	34	(NA)	1,330	524	1,268	(NA)	452	558	270	(NA)	828	828	(X)	(NA)	6

See footnotes at end of table.

TABLE 1. General Statistics: 1963 and Earlier Years—Continued

Year	Operating companies (number)	Establishments		All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Cost of supplies, minerals received for preparation, fuels, purchased electric energy, and contract work (\$1,000)	Cost of purchased machinery installed (\$1,000)	Value of shipments and receipts (\$1,000)	Value of net shipments and receipts (\$1,000)	Quantity of primary products <sup>1</sup> (1,000 tons)	Capital expenditures (\$1,000)	Horsepower rating of power equipment (1,000 hp)
		Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)								
INDUSTRY 1479.—CHEMICAL AND FERTILIZER MINING, N.E.C.—Continued																
1889.....	(NA)	(NA)	(NA)	632	204	617	(NA)	188	507	159	(NA)	(NA)	666	130	(NA)	(NA)
1880.....	(NA)	<sup>4</sup> 8	(NA)	106	25	(NA)	(NA)	(NA)	<sup>12</sup> 134	<sup>12</sup> 2	(NA)	(NA)	<sup>12</sup> 136	(NA)	(NA)	(NA)
1870.....	(NA)	4	(NA)	12	6	(NA)	(NA)	(NA)	13	2	(NA)	(NA)	15	(NA)	(NA)	(NA)

Note: For explanations of column captions see appendix A. For more detailed historical statistics for these industries see table 1 of the corresponding chapter of the 1954 Census of Mineral Industries, Vol. 1.

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable. (Z) Less than one-half of the unit of measure specified. n.e.c. Not elsewhere classified. <sup>1</sup>Revised.

<sup>2</sup>Represents the product indicated by the name of the industry. For 1963, 1958, and 1954, in general, represents net shipments; for earlier years, represents net production. For fluorspar, for 1939 to 1963, represents gross production of crude fluorspar. Represents long tons for phosphate rock and sulfur; for all other products, represents short tons.

<sup>3</sup>Excludes nonproducing operations as follows: For 1939, 1 fluorspar mine; 2 mines and 1 preparation plant in the potash, soda, borate minerals industry; 1 mine and 1 preparation plant in the phosphate rock industry; and 3 sulfur mines; for 1929, 4 fluorspar and 2 sulfur establishments; for 1919, 1 barite, 1 phosphate rock, 1 sulfur, and 1 pyrite establishment; for 1909, 1 pyrite, 1 lithium minerals, and 2 mineral pigments establishments.

<sup>4</sup>Represents the sum of the figures shown for the separate industries or subindustries and probably includes some duplication due to the same company operating in more than one industry.

<sup>5</sup>Represents number of mines.

<sup>6</sup>Excludes the cost of minerals received for preparation which amounted for 1954 to \$38,838 thousand for all chemical and fertilizer minerals industries and to \$35,393 thousand for the phosphate rock industry.

<sup>7</sup>Represents value of net shipments of primary products only.

<sup>8</sup>Figures for average employment were converted to a 300-day basis for establishments which operated for a shorter period.

<sup>9</sup>Only one establishment was reported in the barite industry for 1870 and 1860.

<sup>10</sup>Includes shipments by industries other than potash, soda, and borate minerals, amounting to less than one percent of the total.

<sup>11</sup>Includes shipments by industries other than rock salt, amounting to less than 10 percent of the total.

<sup>12</sup>For 1929 and 1902, figures for the pyrites subindustry (see industry 1479 below) are included with those for the sulfur industry. Only one establishment in the sulfur industry was reported for 1889 and 1880.

<sup>13</sup>Excludes figures for 1 pyrite mine.



TABLE 2. General Statistics by Geographic Areas and Type of Operation: 1963 and 1958

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of net shipments of primary products <sup>2</sup>	Capital expenditures	All employees	Value added in mining
	Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)							
1472—BARIITE, TOTAL.....	54	13	1,434	6,799	911	1,887	3,605	11,107	6,662	16,668	832	1,101	1,227	11,321
<u>Geographic Area</u>														
North Central (Missouri).....	17	5	371	1,305	333	698	1,179	3,779	2,719	6,184	308	314	307	34,527
South Atlantic.....	5	3	144	682	128	312	573	2,113	878	2,708	110	283	849	5,857
South Central.....	12	5	866	4,542	405	779	1,620	4,274	2,420	6,259	286	435	71	937
Mountain.....	20	-	53	270	45	98	233	941	645	1,517	128	69	37	(NA)
	17	-	47	248	39	86	211	859	624	1,415	120	68		
<u>Type of Operation</u>														
Producing establishments, total.....	50	13	1,430	6,791	908	1,881	3,599	11,122	6,600	16,668	832	1,054	922	11,318
Open-pit mines with preparation plants.....	21	10	1,005	4,871	549	1,131	1,958	6,121	4,159	9,491	433	789	662	9,232
Other producing establishments <sup>4</sup> .....	29	3	425	1,920	359	750	1,641	5,001	2,441	7,177	399	265	260	2,086
1473—FLUORSPAR, TOTAL.....	30	7	804	3,981	682	1,346	3,037	8,869	7,236	15,792	595	313	1,235	12,653
<u>Geographic Area</u>														
Northeast and North Central.....	12	4	557	2,816	467	899	2,081	6,127	2,838	8,877	434	88	830	6,590
South.....	11	3	202	952	176	342	785	1,982	4,195	5,958	161	219	164	1,423
Mountain.....	7	-	45	213	39	85	171	760	203	957		6	241	4,640
<u>Type of Operation</u>														
Producing establishments, total.....	27	7	796	3,963	674	1,324	3,019	8,869	7,235	15,792	595	312	1,217	12,736
Open-pits.....	6	-	28	117	25	60	107	564	178	719	34	23	162	3,797
Underground mines, total.....	15	5	662	3,378	585	1,136	2,613	6,382	6,307	9,468	561	274	996	8,461
Mines only.....	9	-	(6)	123	35	62	122	(6)	(6)	254	18	28	104	1,095
Mines with preparation plants.....	6	5	642	3,255	550	1,074	2,491	6,382	3,078	9,214	543	246	892	7,366
Preparation plants only.....	6	2	6126	468	64	128	299	61,923	63,979	5,605	(X)	15	59	478
1474—POTASH, SODA, BORATE MINERALS, TOTAL.....	23	16	7,050	51,859	4,822	9,849	32,901	156,151	62,738	192,116	6,870	26,773	76,661	111,082
<u>Geographic Area</u>														
South Central and Mountain.....	14	12	84,394	831,650	3,308	6,695	22,292	98,921	43,608	120,541	5,159	21,988	4,107	70,174
New Mexico.....	7	6	3,500	25,075	2,699	5,364	18,081	81,151	31,326	98,069	4,222	14,408	3,503	60,141
Pacific (California).....	9	4	2,656	20,209	1,514	3,154	10,609	57,230	19,130	71,575	1,711	4,785	2,554	40,908
<u>Type of Operation</u>														
Producing underground mines with preparation plants.....	9	8	4,076	29,220	3,106	6,179	20,894	95,824	31,837	115,996	5,015	11,665	93,894	967,489
Open-pits, brine operations, and nonproducing operations.....	14	8	2,974	22,639	1,716	3,670	12,007	60,327	30,901	76,120	1,855	15,108	2,242	43,593
1475—PHOSPHATE ROCK, TOTAL.....	66	39	5,624	31,955	3,996	9,047	20,642	94,889	89,003	161,658	20,843	22,234	5,393	64,375
<u>Geographic Area</u>														
East and South.....	53	30	4,720	26,073	3,220	7,420	15,856	81,502	77,522	142,456	18,726	16,568	4,740	57,237
Florida.....	28	21	3,219	16,410	2,540	6,010	11,997	66,121	62,839	101,916	16,402	14,174	(NA)	(NA)
Tennessee.....	20	8	674	4,005	622	1,325	3,656	14,533	11,301	23,440	2,324	2,394	760	8,723
West.....	13	9	904	5,882	776	1,627	4,786	13,387	11,481	19,202	2,117	5,666	653	7,138
<u>Type of Operation</u>														
Producing open-pit mines, total.....	46	28	4,461	25,927	2,985	7,105	15,534	70,920	47,562	103,039	12,497	15,443	4,228	51,748
Without preparation plants.....	15	2	239	1,241	206	399	1,031	3,202	2,546	5,356	446	392	217	1,918
With preparation plants.....	31	26	4,222	24,686	2,779	6,706	14,503	67,718	45,016	97,683	12,051	15,051	4,011	49,830
Other mines and nonproducing establishments.....	10	5	664	4,049	605	1,134	3,570	6,914	7,298	8,492	8,346	5,720	383	3,393
Producing preparation plants only.....	10	6	499	1,979	406	808	1,538	17,055	34,143	50,127		1,071	782	9,234
1476—ROCK SALT, TOTAL.....	25	15	2,443	15,955	1,812	4,260	11,142	49,539	17,159	59,297	118,769	7,401	1,984	34,073
<u>Geographic Area</u>														
Northeast and North Central.....	7	7	1,377	10,360	917	2,283	6,702	28,544	7,306	32,214	115,562	3,636	1,067	20,697
North and West.....	18	8	1,066	5,595	895	1,977	4,440	20,995	9,853	27,083	113,207	3,765	917	13,376
1477—SULFUR.....	17	10	2,603	20,597	1,600	3,264	10,578	100,349	13,840	113,103	4,923	1,086	3,677	94,063
1479—CHEMICAL AND FERTILIZER MINING, N.E.C.	20	6	1,082	5,962	772	1,560	3,773	12,409	6,974	18,270	(X)	1,113	2,020	9,745

Standard Notes: - Represents zero.  
N.E.C. Not elsewhere classified.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

Footnotes continued on next page.

TABLE 2. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Footnotes for Table 2—14E—Continued

<sup>1</sup>General statistics for most States are not shown separately in this table in order to avoid disclosing figures for individual companies or because of the relatively small size of the statistics. Such States are shown below for 1963, with the number of establishments in each State (and in parentheses the number of employees or employment-size range):

SIC 1472, Barite: South Carolina, 1 (20-49); Georgia, 4 (100-249); Kentucky, 1 (50-99); Tennessee, 6 (54); Arkansas, 3 (345); Texas, 2 (250-499, including separately reported central offices and related facilities); Montana, 1 (10-19); New Mexico, 2 (0-4); Nevada, 14 (34); Washington, 1 (0-4); California, 2 (0-4).  
SIC 1473, Fluorspar: Pennsylvania, 1 (5-9); Ohio, 1 (0-4); Illinois, 10 (536, including separately reported central offices and related facilities); Missouri, separately reported central office only (5-9); Delaware, 1 (5-9); Kentucky, 8 (162, including separately reported central offices and related facilities); Texas, 2 (20-49); Montana, 1 (10-19); Colorado, 1 (10-19); Utah, 2 (0-4); Nevada, 3 (10).  
SIC 1474, Potash, Soda, Borate Minerals: New York, separately reported central office only (50-99); Illinois, separately reported central office only (0-4); District of Columbia, separately reported central office only (0-4); Virginia, separately reported central office only (0-4); Oklahoma, separately reported central office only (20-49); Texas, 2 (50-99); Wyoming, 3 (580); Colorado, separately reported central office only (0-4); Utah, 2 (100-249, including separately reported central offices and related facilities).  
SIC 1475, Phosphate Rock: Pennsylvania, 1 (10-19); Illinois, separately reported central office only (500-999); North Carolina, 1 (10-19, including separately reported central offices and related facilities); Georgia, separately reported central office only (10-19); Arkansas, 1 (0-4); Louisiana, 1 (20-49); Texas, 1 (5-9); Montana, 4 (450); Idaho, 4 (229, including separately reported central offices and related facilities); Wyoming, 1 (50-99); Utah, 2 (100-249); California, 2 (10-19).

SIC 1476, Rock Salt: New York, 2 (100-249); Pennsylvania, separately reported central office only (250-499); Ohio, 2 (250-499); Michigan, 1 (100-249); Kansas, 2 (100-249, including separately reported central offices and related facilities); Louisiana, 5 (837); Texas, 1 (50-99, including separately reported central offices and related facilities); New Mexico, 7 (53); Utah, 2 (5-9); Nevada, 1 (0-4); California, 2 (50-99).

SIC 1477, Sulfur: New York, separately reported central offices only (250-499); Louisiana, 4 (1,000-2,499, including separately reported central offices and related facilities); Texas, 6 (1,229, including separately reported central offices and related facilities); Utah, 1 (10-19); Nevada, 1 (0-4); California, 5 (8).  
SIC 1479, Chemical Fertilizer Mining, N.E.C.: New York, 2 (50-99); Pennsylvania, 2 (100-249, including separately reported central offices and related facilities); Michigan, 1 (0-4); South Dakota, 1 (0-4); Virginia, 1 (20-49); West Virginia, 1 (5-9); North Carolina, 2 (50-99); Georgia, 1 (10-19); Tennessee, 1 (500-999); Texas, 1 (5-9); Wyoming, 1 (20-49); Colorado, 1 (50-99); New Mexico, 1 (0-4); Oregon, 1 (0-4); California, 3 (0-4).

<sup>2</sup>Represents the product indicated by the name of the industry, reported in long tons for phosphate rock and sulfur and in short tons for all other products. In general, represents net shipments. For fluorspar, represents gross production of crude fluorspar.

<sup>3</sup>Includes data for one establishment with less than 5 employees in Kansas.

<sup>4</sup>For 1963, represents data for one underground mine without a preparation plant, one underground mine with a preparation plant, 2 combination open-pit and underground mines with preparation plants and 25 open-pit mines without preparation plants.

<sup>5</sup>Includes data for 4 combination open-pit and underground mines.

<sup>6</sup>Figures for underground mines only are included with those for preparation plants only.

<sup>7</sup>Includes data for central offices which were not distributed by type of operation.

<sup>8</sup>Includes figures for central offices and related facilities in New York, Illinois, District of Columbia, and Virginia.

<sup>9</sup>Includes data for one combination open-pit and underground mine with preparation plant.

<sup>10</sup>Includes figures for phosphate rock mined, washed, or concentrated in Pennsylvania, North Carolina, Arkansas, Louisiana, and Texas, amounting to less than 10 percent of this total.

<sup>11</sup>Includes shipments by industries other than rock salt, amounting to less than 10 percent of the total.

TABLE 3. Detailed Statistics for Geographic

Item	147-- Chemical and fertilizer minerals industries, total	1472-Barite industry						1473-Fluorspar industry				
		United States, all operations	West North Central (Missouri)	South		Producing open-pit mines with pre- paration plants	United States, all operations	Northeast and North Central	South	Producing under- ground mines with pre- paration plants	Producing preparation plants only	
				All operations	South Central							
Establishments, total.....number..	235	54	17	17	12	21	30	12	11	6	6	
With 0 to 19 employees.....do....	129	41	12	9	7	11	23	8	8	1	4	
With 20 to 99 employees.....do....	57	11	5	6	3	10	5	2	3	3	2	
With 100 employees and over.....do....	49	2	-	2	2	-	2	2	-	2	-	
Including mines.....do....	217	54	17	17	12	21	24	10	7	6	-	
Including preparation plants.....do....	138	27	10	11	7	21	16	6	5	6	6	
Net shipments of primary products <sup>1</sup> .....1,000 tons..	(X)	832	308	396	286	433	595	434	(D)	543	(X)	
Value of shipments and receipts, total.....\$1,000..	576,904	16,668	6,184	8,967	6,259	9,491	15,792	8,877	5,958	9,214	5,605	
Minerals transferred to other establishments for preparation and resale <sup>4</sup> .....do....	40,064	132	-	(D)	-	132	3,452	287	3,165	(D)	3,393	
Net shipments and receipts, total.....do....	536,840	16,536	6,184	(D)	6,259	9,359	12,340	8,590	2,793	(D)	2,212	
Primary products.....do....	536,840	16,392	6,184	8,792	6,259	9,215	10,001	8,590	2,793	(D)	2,212	
Other products and services.....do....		144		(D)		144	2,339			1,904		
Value added in mining.....do....	433,313	11,107	3,779	6,387	4,274	6,121	8,869	6,127	1,982	6,382	(D)	
Persons in industry, total.....number..	21,118	1,467	385	1,018	870	1,020	808	597	203	642	(D)	
Production, development, and exploration workers, average for year.....do....	14,595	7911	333	533	405	549	7682	467	176	550	64	
March.....do....	14,455	964	341	587	461	582	655	456	162	534	56	
May.....do....	14,516	953	369	542	420	556	688	484	165	560	65	
August.....do....	14,421	873	354	471	340	550	706	478	185	560	68	
November.....do....	14,508	853	262	531	399	504	688	552	195	543	67	
All other employees.....do....	6,445	523	38	477	461	456	122	90	26	92	(D)	
Proprietors and firm members.....do....	78	33	14	8	4	15	4	-	1	-	-	
Performing manual labor.....do....	59	23	10	2	1	8	4	-	1	-	-	
Man-hours worked by production, development, and exploration workers, total.....1,000..	31,213	1,887	698	1,091	779	1,131	1,346	899	362	1,074	128	
At mines and well operations, total.....do....	18,418	867	377	442	367	434	874	565	251	743	-	
Underground.....do....	6,964	157	-	147	147	-	651	472	156	628	-	
Open-pits and well operations.....do....	6,414	567	328	205	180	350	56	5	33	-	-	
Surface (including mine shops and yards).....do....	5,040	143	49	90	40	84	167	88	62	115	-	
At preparation plants.....do....	12,795	1,020	321	649	412	697	472	334	111	331	128	
Man-hours spent on development and exploration work (included above).....do....	1,108	14	2	11	9	14	20	9	11	19	-	
Principal expenses designated below, total.....\$1,000..	306,871	12,719	3,817	8,031	6,743	8,429	10,949	5,581	4,957	6,092	(D)	
Wages of production, development, and exploration workers.....do....	85,678	3,605	1,179	2,193	1,620	1,958	3,037	2,081	785	2,491	299	
Salaries of all other employees.....do....	51,430	3,194	126	3,031	2,922	2,913	944	741	161	764	169	
Supplies and purchases for resale.....do....	69,335	3,758	1,403	1,940	1,605	2,109	2,258	1,525	609	(D)	(D)	
Minerals received for preparation.....do....	41,266	-	-	-	-	-	3,339	284	3,055	1,740	3,283	
Purchased fuel.....do....	23,630	374	109	246	175	216	456	346	84	347	76	
Purchased electric energy.....do....	15,694	831	305	481	388	432	595	432	136	459	114	
Contract work.....do....	19,838	957	695	140	33	801	320	172	127	291	-	
Purchased machinery installed.....do....	33,849	742	207	491	219	601	268	79	184	241	-	
Capital expenditures, total.....do....	60,021	1,101	314	718	435	789	313	88	219	246	15	
Development and exploration of mineral property...do....	10,801	20	-	20	20	20	15	8	6	-	-	
Preparation plants and other construction.....do....	11,801	440	108	263	32	263	163	17	144	138	6	
New machinery and equipment.....do....	36,414	526	201	325	299	396	89	58	29	69	9	
Used plant and equipment.....do....	1,005	115	5	110	84	110	46	5	41	39	-	
Energy used.....million kwh. equivalent..	25,695	271	61	205	173	105	331	269	53	280	49	
Coal.....1,000 short tons..	170	(2)	(2)	-	-	(2)	24	24	-	24	-	
Fuel oil.....1,000 barrels..	1,770	22	5	16	8	16	31	21	9	21	9	
Gas.....million cu. ft..	62,702	451	38	413	379	89	86	-	63	23	63	
Gasoline.....1,000 gallons..	3,174	328	161	159	107	221	104	38	52	41	49	
Other fuels and undistributed <sup>8</sup> .....\$1,000..	451	47	29	10	9	10	106	94	12	98	8	
Electric energy purchased.....million kw.-hrs..	1,638	68	24	42	33	36	35	24	10	25	9	
Electric energy generated and used.....do....	460	-	-	-	-	-	20	20	-	20	-	
Horsepower rating of power equipment (prime movers and electric motors driven by purchased energy), total.....1,000 hp..	1,235	60	23	31	22	35	24	16	6	17	5	
Per production worker.....hp..	85	66	69	58	54	64	35	34	34	31	78	
Prime movers.....1,000 hp..	592	40	17	18	11	24	11	8	2	8	2	
Electric motors driven by purchased energy.....do....	643	20	6	13	11	11	13	8	4	9	3	
Horsepower rating of electric motors driven by energy generated at the establishment.....do....	120	(2)	(2)	-	-	(2)	6	6	-	7	-	

# Areas and Types of Operation: 1963

1474-Potash, soda, and borate minerals industry					1475-Phosphate rock industry								1476-Rock salt industry					1477-Sulfur industry	1479-Chemical and fertilizer mining n.e.c., industry	
United States, all operations	West South Central and Mountain		Pacific (California)	Producing underground mines with preparation plants	United States, all operations	East and South			West	Producing open-pit mines		Producing preparation plants only	United States, all operations	Northeast and North Central	South and West					
	All operations	New Mexico				All operations	Florida	Tennessee		Without preparation plants	With preparation plants									
23	14	7	9	9	66	53	28	20	13	15	31	10	25	7	18	17	20	1		
7	2	1	5	1	27	23	7	12	4	13	5	4	10	-	10	7	14	2		
5	4	-	1	-	23	15	7	7	8	2	13	5	7	2	5	1	5	3		
11	8	6	3	8	16	15	14	1	1	-	13	1	8	5	3	9	1	4		
23	14	7	9	9	56	43	23	18	13	15	31	-	23	7	16	17	20	5		
19	13	6	6	9	43	36	23	10	7	-	31	10	20	7	13	3	10	6		
6,870	5,159	4,222	1,711	5,015	20,843	18,726	216,402	2,324	2,117	446	12,051	(D)	38,769	35,562	33,207	4,923	(X)	7		
192,116	120,541	98,069	71,575	115,996	161,658	142,456	2119,016	23,440	19,202	5,356	97,683	50,127	59,297	32,214	27,083	113,103	18,270	8		
192,116	(D)	(D)	(D)	(D)	31,363	30,365	227,555	2,810	998	(D)	25,377	-	667	208	459	-	18,270	9		
186,524	(D)	(D)	(D)	(D)	130,295	112,091	291,461	20,630	18,204	55,356	593,018	521,169	58,630	32,006	26,624	113,103	10,689	10		
(D)	(D)	(D)	(D)	(D)	130,295	112,091	291,461	20,630	18,204	55,356	593,018	521,169	58,630	32,006	22,695	113,091	(D)	11		
156,151	98,921	81,151	57,230	95,824	94,889	81,502	66,121	14,533	13,387	3,202	67,718	17,055	49,539	28,544	20,995	100,349	12,409	13		
7,055	6,397	3,502	2,658	4,076	5,640	4,732	3,223	682	908	247	4,226	499	2,450	1,377	1,073	2,607	1,091	14		
74,822	3,308	2,699	1,514	3,106	3,996	3,220	2,540	622	776	206	2,779	406	71,812	917	895	71,600	7772	15		
4,861	3,354	2,778	1,507	3,177	3,856	3,159	2,476	625	697	158	2,686	404	1,862	944	918	1,598	774	16		
4,836	3,345	2,747	1,491	3,145	4,011	3,216	2,559	615	795	213	2,744	425	1,751	892	859	1,601	791	17		
4,792	3,267	2,633	1,525	3,053	4,048	3,237	2,539	627	811	238	2,738	407	1,759	862	897	1,595	763	18		
4,800	3,262	2,636	1,538	3,046	4,047	3,255	2,574	621	802	216	2,801	381	1,869	966	903	1,596	760	19		
2,228	1,086	801	1,142	969	1,628	1,500	679	52	128	33	621	93	631	460	171	1,003	310	20		
5	3	2	2	-	16	12	4	8	4	8	4	-	7	-	7	4	9	21		
3	3	2	-	-	13	10	4	6	3	6	3	-	5	-	5	4	7	22		
9,849	6,695	5,364	3,154	6,179	9,047	7,420	6,010	1,325	1,627	399	6,706	808	4,260	2,283	1,977	3,264	1,560	23		
4,287	4,105	3,388	182	3,890	5,020	3,750	3,231	497	1,270	399	3,569	-	3,058	2,092	966	3,239	1,073	24		
3,010	3,010	2,610	-	2,989	761	-	-	-	761	-	-	-	1,617	1,293	324	-	768	25		
253	73	-	180	-	3,016	2,799	2,457	327	217	230	2,650	-	209	-	209	2,149	164	26		
1,024	1,022	778	2	901	1,243	951	774	170	292	169	919	-	1,232	799	433	1,090	141	27		
5,562	2,590	1,976	2,972	2,289	4,027	3,670	2,779	828	357	-	3,137	808	1,202	191	1,011	25	487	28		
197	105	-	92	-	828	174	98	61	654	615	132	-	22	20	2	25	2	29		
102,818	66,294	51,268	36,524	55,535	106,054	90,777	74,365	13,175	15,277	3,196	51,763	35,765	27,956	15,051	12,905	33,638	12,737	30		
32,901	22,292	18,081	10,609	20,894	20,642	15,856	11,997	3,656	4,786	1,031	14,503	1,538	11,142	6,702	4,440	10,578	3,773	31		
18,958	9,358	6,994	9,600	8,326	11,313	10,217	9,974	349	1,096	210	10,183	441	4,813	3,658	1,155	10,019	2,189	32		
28,687	21,191	18,022	7,496	20,571	17,568	14,813	41,434	3,127	3,939	1,009	12,374	2,469	10,108	3,583	6,525	4,994	5,742	33		
9,650	3,054	1,994	6,596	2,797	4,986	4,520	3,320	1,188	466	228	3,010	1,630	509	143	366	7,546	109	35		
4,624	3,086	2,558	1,538	2,638	8,274	7,814	7,290	498	460	20	7,190	726	957	633	324	50	363	36		
7,998	7,313	3,619	685	309	9,648	5,118	350	4,357	4,530	698	5,719	3	427	332	95	451	37	37		
11,779	8,964	5,133	2,815	5,522	14,904	12,818	210,687	2,131	2,086	591	12,058	357	5,158	2,615	2,543	799	199	38		
26,773	21,988	14,408	4,785	11,665	22,234	16,568	214,174	2,394	5,666	392	15,051	1,071	7,401	3,636	3,765	1,086	1,113	39		
7,806	7,276	3,771	530	2,876	1,902	1,022	2979	43	880	26	142	16	983	437	546	3	72	40		
4,893	4,885	4,620	8	2,404	5,494	2,808	22,123	324	2,686	10	3,217	122	556	286	260	77	178	41		
13,766	9,520	5,725	4,246	6,370	14,512	12,452	211,029	1,765	2,060	322	11,441	932	5,688	2,892	2,796	986	847	42		
308	307	292	1	15	326	286	243	262	40	35	251	1	174	21	153	20	16	43		
8,279	4,211	3,204	4,068	4,126	4,619	4,296	2,967	1,322	323	41	3,460	992	502	99	403	11,583	110	44		
-	-	-	-	-	146	140	-	140	6	-	146	-	-	-	-	-	(2)	45		
677	30	6	647	16	989	935	919	15	54	12	583	346	24	19	5	20	7	46		
21,202	12,424	9,490	8,778	12,409	2,208	1,825	1,467	351	383	-	1,286	922	1,207	28	1,179	37,463	85	47		
777	656	160	121	194	1,323	1,173	689	469	150	464	739	56	286	221	65	328	28	48		
127	43	34	84	34	82	68	34	34	14	11	19	42	26	1	25	23	40	49		
457	305	259	152	266	941	884	793	90	57	1	824	78	73	49	24	3	61	50		
344	162	99	182	162	-	-	-	-	-	-	-	-	9	-	9	87	-	51		
330	187	141	143	158	525	467	401	60	58	26	407	61	106	70	36	151	39	52		
68	57	52	94	51	131	145	158	96	75	126	146	150	58	76	40	94	51	53		
167	75	49	92	65	169	131	91	35	38	24	110	21	46	23	23	150	9	54		
163	112	92	51	93	356	336	310	25	20	2	297	40	60	47	13	1	30	55		
81	48	34	33	48	(2)	(2)	(2)	(2)	-	(2)	-	-	2	-	2	30	-	56		

Footnotes on next page.

TABLE 3. Detailed Statistics for Geographic Areas and Types of Operation: 1963--Continued

Footnotes for table 3-14E

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
 ) Less than one-half of the unit of measure specified. n.e.c. Not elsewhere classified.  
<sup>1</sup>Represents the product indicated by the name of the industry, reported in long tons for phosphate rock and sulfur and in short tons for all other products.  
 general, represents net shipments. For fluorspar, represents gross production of crude fluorspar.  
<sup>2</sup>Includes figures for 5 establishments in Pennsylvania, North Carolina, Arkansas, Louisiana, and Texas.  
<sup>3</sup>Includes shipments by industries other than rock salt, amounting to less than 10 percent of the total.  
<sup>4</sup>Except for potash, soda, and borate minerals and phosphate rock, represents the cost of minerals received for preparation. Information on shipments for preparation was not obtained for these industries.  
<sup>5</sup>Net shipments by type of operation were computed by subtracting the cost of minerals received for preparation from the gross value of shipments.  
<sup>6</sup>Includes figures for central offices and related facilities in New York, Illinois, the District of Columbia, and Virginia.  
<sup>7</sup>Number of production, development, and exploration workers was collected for all months for the following industries, for which United States totals by months are:

Industry	January	February	March	April	May	June	July	August	September	October	November	December
Barite.....	902	890	964	951	953	967	938	873	857	820	853	791
Fluorspar.....	656	651	655	678	688	699	716	706	677	683	688	692
Potash, soda, and borate minerals....	4,825	4,797	4,861	4,906	4,836	4,801	4,805	4,792	4,728	4,728	4,800	4,779
Rock salt.....	1,915	1,900	1,862	1,748	1,751	1,771	1,762	1,759	1,768	1,811	1,869	1,898
Sulfur.....	1,625	1,609	1,598	1,580	1,601	1,588	1,579	1,595	1,567	1,587	1,596	1,593
Chemical and fertil- izer mining, n.e.c.	775	771	774	778	791	766	758	763	756	756	760	758

<sup>8</sup>Undistributed fuels costs for all chemical-fertilizer minerals industries were approximately \$134 thousand.

TABLE 4A. Selected Statistics, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
GROUP 147.—CHEMICAL AND FERTILIZER MINERALS											
Establishments.....number..	235	79	23	27	25	32	30	11	8	-	-
All employees:											
Total.....do....	21,040	106	159	364	794	2,695	4,969	4,529	7,424	-	-
Payroll.....\$1,000..	137,108	363	718	1,558	3,602	14,828	30,597	31,804	53,638	-	-
Production, development, and exploration workers:											
Total.....number..	14,595	90	136	314	660	2,043	3,774	3,175	4,403	-	-
Man-hours.....1,000..	31,213	191	275	667	1,379	4,302	8,364	6,859	9,176	-	-
Wages.....\$1,000..	85,678	299	625	1,230	2,717	10,098	21,887	20,465	28,357	-	-
Value added in mining.....do....	433,313	1,018	1,789	3,886	11,477	38,796	124,428	113,549	138,370	-	-
Value of shipments and receipts.....do....	576,904	1,570	3,613	6,542	20,673	77,225	160,175	134,989	172,117	-	-
Capital expenditures.....do....	60,021	5,058	246	1,427	3,014	9,618	17,012	15,299	8,347	-	-
INDUSTRY 1472.—BARITE											
Establishments.....number..	54	25	4	12	6	5	2	-	-	-	-
All employees:											
Total.....do....	1,434	23	30	160	183	<u>1,038</u>	(D)	-	-	-	-
Payroll.....\$1,000..	6,799	58	134	662	693	<u>5,252</u>	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	911	18	27	141	155	570	(D)	-	-	-	-
Man-hours.....1,000..	1,887	37	57	297	336	<u>1,160</u>	(D)	-	-	-	-
Wages.....\$1,000..	3,605	47	127	556	544	<u>2,331</u>	(D)	-	-	-	-
Value added in mining.....do....	11,107	380	338	1,720	1,418	<u>7,251</u>	(D)	-	-	-	-
Value of shipments and receipts.....do....	16,668	616	734	2,148	1,752	<u>11,418</u>	(D)	-	-	-	-
Capital expenditures.....do....	1,101	87	-	211	325	<u>478</u>	(D)	-	-	-	-
Producing establishments, by type of operation, total.....number..	50	21	4	12	6	5	2	-	-	-	-
Mines only:											
Open-pits.....do....	25	18	-	6	1	-	-	-	-	-	-
Underground mines.....do....	1	1	-	-	-	-	-	-	-	-	-
Mines with preparation plants:											
Open-pits.....do....	21	2	4	5	5	5	-	-	-	-	-
Combination open-pit and underground mines.....do....	2	-	-	-	-	-	2	-	-	-	-
Underground mines.....do....	1	-	-	1	-	-	-	-	-	-	-
INDUSTRY 1473.—FLUORSPAR											
Establishments.....number..	30	14	5	4	3	2	2	-	-	-	-
All employees:											
Total.....do....	804	30	33	60	105	576	(D)	-	-	-	-
Payroll.....\$1,000..	3,981	122	170	217	507	<u>2,965</u>	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	682	29	27	51	79	496	(D)	-	-	-	-
Man-hours.....1,000..	1,346	58	47	113	147	981	(D)	-	-	-	-
Wages.....\$1,000..	3,037	122	136	154	341	<u>2,284</u>	(D)	-	-	-	-
Value added in mining.....do....	8,869	205	751	810	1,254	<u>5,849</u>	(D)	-	-	-	-
Value of shipments and receipts.....do....	15,792	392	1,147	1,174	4,762	<u>8,317</u>	(D)	-	-	-	-
Capital expenditures.....do....	313	23	27	5	13	<u>245</u>	(D)	-	-	-	-
Producing establishments, by type of operation, total.....number..	27	11	5	4	3	2	2	-	-	-	-
Mines only:											
Open-pits.....do....	2	1	1	-	-	-	-	-	-	-	-
Underground mines.....do....	9	7	1	1	-	-	-	-	-	-	-
Mines with preparation plants:											
Open-pits.....do....	4	2	1	1	-	-	-	-	-	-	-
Underground mines.....do....	6	-	-	1	1	2	2	-	-	-	-
Preparation plants only.....do....	6	1	2	1	2	-	-	-	-	-	-
INDUSTRY 1474.—POTASH, SODA, AND BORATE MINERALS											
Establishments.....number..	23	7	-	-	1	4	2	4	5	-	-
All employees:											
Total.....do....	7,050	12	-	-	639	(D)	(D)	1,586	4,813	-	-
Payroll.....\$1,000..	51,859	71	-	-	<u>4,727</u>	(D)	(D)	11,243	35,818	-	-
Production, development, and exploration workers:											
Total.....number..	4,822	6	-	-	447	(D)	(D)	1,244	3,125	-	-
Man-hours.....1,000..	9,849	14	-	-	<u>1,024</u>	(D)	(D)	2,493	6,318	-	-
Wages.....\$1,000..	32,901	24	-	-	<u>3,145</u>	(D)	(D)	8,519	21,213	-	-
Value added in mining.....do....	156,151	45	-	-	<u>12,783</u>	(D)	(D)	48,785	94,538	-	-
Value of shipments and receipts.....do....	192,116	46	-	-	<u>19,457</u>	(D)	(D)	54,531	118,082	-	-
Capital expenditures.....do....	26,773	4,918	-	-	<u>8,400</u>	(D)	(D)	6,659	6,796	-	-

See footnotes at end of table.

TABLE 4A. Selected Statistics, by Employment Size of Establishment: 1963—Continued

Item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
INDUSTRY 1474.—POTASH, SODA, AND BORATE MINERALS—Continued											
Producing establishments, by type of operation, total.....number..	18	3	-	-	1	3	2	4	5	-	-
Mines with preparation plants:											
Open-pits.....do.....	3	2	-	-	-	-	-	-	1	-	-
Underground mines.....do.....	9	1	-	-	-	-	2	3	3	-	-
Brine operations.....do.....	6	-	-	-	1	3	-	1	1	-	-
INDUSTRY 1475.—PHOSPHATE ROCK											
Establishments.....number..	66	10	11	6	10	13	11	4	1	-	-
All employees:											
Total.....do.....	5,624	13	80	77	301	1,039	1,401	2,713	(D)	-	-
Payroll.....\$1,000..	31,955	46	349	409	1,423	5,437	6,762	17,529	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	3,996	12	71	64	267	874	1,136	1,572	(D)	-	-
Man-hours.....1,000..	9,047	24	148	134	537	1,838	2,644	3,722	(D)	-	-
Wages.....\$1,000..	20,642	43	310	284	1,149	4,376	5,335	9,145	(D)	-	-
Value added in mining.....do.....	94,889	151	535	976	4,947	21,178	33,685	33,417	(D)	-	-
Value of shipments and receipts.....do.....	161,658	189	1,550	2,461	10,099	50,724	48,667	47,968	(D)	-	-
Capital expenditures.....do.....	22,234	9	187	1,097	264	2,313	11,111	7,253	(D)	-	-
Producing establishments, by type of operation, total.....number..	61	8	9	5	10	13	11	4	1	-	-
Mines only:											
Open-pits.....do.....	15	6	4	3	-	2	-	-	-	-	-
Underground mines.....do.....	3	-	-	-	-	1	1	1	-	-	-
Mines with preparation plants:											
Open-pits.....do.....	31	2	2	1	7	6	9	3	1	-	-
Combination open-pit and underground mines.....do.....	1	-	-	-	-	1	-	-	-	-	-
Underground mines.....do.....	1	-	-	-	1	-	-	-	-	-	-
Preparation plants only.....do.....	10	-	3	1	2	3	1	-	-	-	-
INDUSTRY 1476.—ROCK SALT											
Establishments.....number..	25	8	1	1	3	4	6	2	-	-	-
All employees:											
Total.....do.....	2,443	9	125	(D)	(D)	356	1,953	(D)	-	-	-
Payroll.....\$1,000..	15,955	22	572	(D)	(D)	2,079	13,282	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,812	8	94	(D)	(D)	233	1,477	(D)	-	-	-
Man-hours.....1,000..	4,260	19	203	(D)	(D)	514	3,524	(D)	-	-	-
Wages.....\$1,000..	11,142	21	389	(D)	(D)	1,138	9,594	(D)	-	-	-
Value added in mining.....do.....	49,539	89	3,025	(D)	(D)	3,730	42,695	(D)	-	-	-
Value of shipments and receipts.....do.....	59,297	130	2,726	(D)	(D)	5,281	51,160	(D)	-	-	-
Capital expenditures.....do.....	7,401	6	2,396	(D)	(D)	174	4,825	(D)	-	-	-
Producing establishments, by type of operation, total.....number..	24	7	1	1	3	4	6	2	-	-	-
Mines only (open-pits).....do.....	4	4	-	-	-	-	-	-	-	-	-
Mines with preparation plants:											
Open-pits.....do.....	3	1	1	-	-	1	-	-	-	-	-
Combination underground mines and brine operations.....do.....	1	-	-	-	-	-	-	1	-	-	-
Underground mines.....do.....	14	2	-	-	2	3	6	1	-	-	-
Preparation plants only.....do.....	2	-	-	1	1	-	-	-	-	-	-
INDUSTRY 1477.—SULFUR											
Establishments.....number..	17	6	-	1	-	1	7	1	1	-	-
All employees:											
Total.....do.....	2,603	10	-	2,593	-	(D)	(D)	(D)	(D)	-	-
Payroll.....\$1,000..	20,597	29	-	20,568	-	(D)	(D)	(D)	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	1,600	9	-	1,591	-	(D)	(D)	(D)	(D)	-	-
Man-hours.....1,000..	3,264	18	-	3,246	-	(D)	(D)	(D)	(D)	-	-
Wages.....\$1,000..	10,578	28	-	10,550	-	(D)	(D)	(D)	(D)	-	-
Value added in mining.....do.....	100,349	2	-	100,347	-	(D)	(D)	(D)	(D)	-	-
Value of shipments and receipts.....do.....	113,103	15	-	113,088	-	(D)	(D)	(D)	(D)	-	-
Capital expenditures.....do.....	1,086	2	-	1,084	-	(D)	(D)	(D)	(D)	-	-
Producing establishments, by type of operation, total.....number..	13	3	-	-	-	1	7	1	1	-	-
Mines only:											
Open-pits.....do.....	3	3	-	-	-	-	-	-	-	-	-
Well operations.....do.....	8	-	-	-	-	1	6	1	-	-	-
Mines with preparation plants (well operations).....do.....	2	-	-	-	-	-	1	-	1	-	-

See footnotes at end of table.

TABLE 4A. Selected Statistics, by Employment Size of Establishment: 1963—Continued

Item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
	INDUSTRY 1479.—CHEMICAL AND FERTILIZER MINING, N.E.C.										
Establishments.....number..	20	9	2	3	2	3	-	-	1	-	-
All employees:											
Total.....do....	1,082	9	<u>53</u>	(D)	<u>1,020</u>	(D)	-	-	(D)	-	-
Payroll.....\$1,000..	5,962	15	<u>226</u>	(D)	<u>5,721</u>	(D)	-	-	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	772	8	<u>41</u>	(D)	<u>723</u>	(D)	-	-	(D)	-	-
Man-hours.....1,000..	1,560	21	<u>86</u>	(D)	<u>1,453</u>	(D)	-	-	(D)	-	-
Wages.....\$1,000..	3,773	14	<u>187</u>	(D)	<u>3,572</u>	(D)	-	-	(D)	-	-
Value added in mining.....do....	12,409	146	<u>363</u>	(D)	<u>11,900</u>	(D)	-	-	(D)	-	-
Value of shipments and receipts.....do....	18,270	182	<u>815</u>	(D)	<u>17,273</u>	(D)	-	-	(D)	-	-
Capital expenditures.....do....	1,113	13	<u>43</u>	(D)	<u>1,057</u>	(D)	-	-	(D)	-	-
Producing establishments, by type of operation, total.....number..	19	9	1	3	2	3	-	-	1	-	-
Mines only:											
Open-pits.....do....	9	8	-	1	-	-	-	-	-	-	-
Underground mines.....do....	1	1	-	-	-	-	-	-	-	-	-
Mines with preparation plants:											
Open-pits.....do....	6	-	1	2	2	1	-	-	-	-	-
Underground mines.....do....	3	-	-	-	-	2	-	-	1	-	-

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.

n.e.c. Not elsewhere classified.



**TABLE 4B. Producing Establishments with Preparation Plants, by Employment Size of Establishment: 1963**

Mineral preparation method	Establishments, total	Establishments with an average of—							
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees
INDUSTRY 1472.—BARITE									
Establishments with preparation plants.....	24	2	4	6	5	5	2	-	-
Establishments reporting specified preparation method: <sup>1</sup>	16	-	2	5	4	4	1	-	-
Washing.....	15	2	2	2	3	5	1	-	-
Crushing, grinding, or pulverizing.....	13	2	2	5	2	1	1	-	-
Screening.....	9	-	1	2	3	1	2	-	-
Flotation and gravity.....	5	-	-	1	3	1	-	-	-
Drying, air separation, or other.....	1	-	-	-	1	-	-	-	-
Carbonation, crystallization, or evaporation.....									
INDUSTRY 1473.—FLUORSPAR									
Establishments with preparation plants.....	16	3	3	3	3	2	2	-	-
Establishments reporting specified preparation method: <sup>1</sup>	11	1	2	2	1	3	2	-	-
Crushing, grinding, or pulverizing.....	8	-	1	-	3	2	2	-	-
Flotation and gravity.....	6	1	1	2	-	-	2	-	-
Washing.....	5	-	1	2	-	-	2	-	-
Screening.....	5	1	1	1	-	-	2	-	-
Drying, air separation, or other.....									
INDUSTRY 1474.—POTASH, SODA, AND BORATE MINERALS									
Establishments with preparation plants.....	18	3	-	-	1	3	2	4	5
Establishments reporting specified preparation method: <sup>1</sup>	13	-	-	-	1	3	1	3	5
Carbonation, crystallization, or evaporation.....	8	1	-	-	-	-	2	2	3
Crushing, grinding, or pulverizing.....	8	2	-	-	-	1	1	1	3
Drying, air separation, or other.....	7	-	-	-	-	1	1	2	3
Flotation and gravity.....	6	1	-	-	-	-	1	1	3
Screening.....	3	-	-	-	-	-	1	-	2
Washing.....	1	1	-	-	-	-	-	-	-
Calcining.....									
INDUSTRY 1475.—PHOSPHATE ROCK									
Establishments with preparation plants.....	43	2	5	2	10	10	10	3	1
Establishments reporting specified preparation method: <sup>1</sup>	27	1	5	2	5	8	4	1	1
Crushing, grinding, or pulverizing.....	26	1	1	-	5	6	9	3	1
Washing.....	17	1	1	-	3	6	4	1	1
Drying.....	16	-	-	-	3	1	9	2	1
Flotation concentration.....	5	-	-	-	-	3	-	1	1
Calcining.....	2	-	1	-	-	1	-	-	-
Air separation.....									
INDUSTRY 1476.—ROCK SALT									
Establishments with preparation plants.....	20	3	1	1	3	4	6	2	-
Establishments reporting specified preparation method: <sup>1</sup>	19	2	1	1	3	4	6	2	-
Screening.....	17	2	1	-	2	4	6	2	-
Crushing, grinding, or pulverizing.....	8	1	-	1	1	3	1	1	-
Drying, air separation, or other.....	4	1	-	-	-	1	2	-	-
Carbonation, crystallization, or evaporation.....	1	-	-	-	-	1	-	-	-
Washing.....									
INDUSTRY 1477.—SULFUR									
Establishments with preparation plants.....	2	-	-	-	-	-	1	-	1
Establishments reporting specified preparation method: <sup>1</sup>	1	-	-	-	-	-	-	-	1
Crushing, grinding, or pulverizing.....	1	-	-	-	-	-	1	-	-
Flotation and gravity.....									
INDUSTRY 1479.—CHEMICAL AND FERTILIZER MINING, N.E.C.									
Establishments with preparation plants.....	9	-	1	2	2	3	-	-	1
Establishments reporting specified preparation method: <sup>1</sup>	9	-	1	2	2	3	-	-	1
Crushing, grinding, or pulverizing.....	5	-	-	1	1	2	-	-	1
Screening.....	3	-	-	1	1	1	-	-	-
Washing.....	2	-	-	-	1	1	-	-	-
Drying, air separation, or other.....	1	-	-	-	-	1	-	-	-
Flotation and gravity.....									

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.  
<sup>1</sup>Some establishments reported more than one mineral preparation method used and are included in the line for each method reported.

TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts and Net Shipments of Primary Products: 1963 and 1958

(In thousands of dollars)

Ind. code	Industry	Value of shipments and receipts of establishments classified in the industry					Value of net shipments of primary products of the industry shipped by establishments in all industries		
		Total	Primary products	Secondary products	Receipts for services	Products purchased and resold without further processing	Total (produced in all industries)	Produced in this industry	Produced in other industries
1472	Barite.....1963..	16,668	(D)	(D)	(D)	(D)	32,034	16,392	15,642
	1958..	13,768	(D)	(D)	(D)	-	31,868	13,434	18,434
1473	Fluorspar.....1963..	15,792	13,340	2,090	249	113	10,038	10,001	37
	1958..	19,977	18,781	(D)	(D)	-	15,443	15,443	-
1474	Potash, soda, and borate minerals.....1963..	192,116	(D)	(D)	-	(D)	186,524	186,524	-
	1958..	141,115	138,807	2,308	-	-	138,413	(D)	(D)
1475	Phosphate rock.....1963..	161,658	161,658	-	-	-	130,295	130,295	-
	1958..	132,094	131,969	(D)	(D)	52	99,036	99,036	-
1476	Rock salt.....1963..	59,297	54,798	(D)	-	(D)	58,207	(D)	(D)
	1958..	41,813	37,623	4,190	-	-	40,525	(D)	(D)
1477	Sulfur.....1963..	113,103	113,091	12	-	-	113,091	113,091	-
	1958..	106,202	106,200	2	-	-	106,200	106,200	-
1479	Chemical and fertilizer mining, n.e.c..1963..	18,270	11,213	(D)	-	(D)	13,229	10,689	2,540
	1958..	15,760	(D)	(D)	(D)	-	10,826	(NA)	(NA)

Standard Notes: - Represents zero.  
n.e.c. Not elsewhere classified.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958

Product and geographic area	1963			1958		
	Total production <sup>1</sup>	Total shipments (including interplant transfers) or receipts		Total production <sup>1</sup>	Total shipments (including interplant transfers) or receipts	
		Quantity <sup>1</sup> (1,000 tons)	Value (\$1,000)		Quantity <sup>1</sup> (1,000 tons)	Value (\$1,000)
BARITE						
United States:						
Crude barite:						
Production and shipments.....	1,088	268	3,589	608	148	1,402
Mined and prepared at same establishment.....	850	(X)	(X)	563	(X)	(X)
Prepared barite (crushed or ground, including flotation concentrates), total.....	(NA)	1,147	28,445	(NA)	1,120	30,466
Processed at establishments classified in the barite industry.....	571	<sup>2</sup> 564	<sup>2</sup> 12,803	470	<sup>2</sup> 455	<sup>2</sup> 12,032
Processed at establishments classified in other mineral industries and in manufacturing industries.....	(NA)	583	15,642	(NA)	665	18,434
North Central (Missouri):						
Crude barite:						
Production and shipments.....	296	104	1,530	148	53	772
Mined and prepared at same establishment.....	199	(X)	(X)	158	(X)	(X)
Prepared barite (crushed or ground, including flotation concentrates).....	(NA)	204	4,632	(NA)	<sup>2</sup> 202	<sup>2</sup> 5,728
South Atlantic:						
Crude barite:						
Production and shipments.....	118	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
South Central:						
Crude barite:						
Production and shipments.....	538	<sup>3</sup> 78	<sup>3</sup> 1,412	<sup>3</sup> 394	<sup>3</sup> 28	<sup>3</sup> 390
Mined and prepared at same establishment.....	<sup>3</sup> 593	(X)	(X)	<sup>3</sup> 375	(X)	(X)
Prepared barite (crushed or ground, including flotation concentrates), total.....	(NA)	<sup>3</sup> 851	<sup>3</sup> 21,776	(NA)	<sup>3</sup> 860	<sup>3</sup> 23,374
Processed at establishments classified in the barite industry..	<sup>3</sup> 327	<sup>2</sup> 318	<sup>2</sup> 37,380	<sup>3</sup> 271	<sup>2</sup> 3259	<sup>2</sup> 36,923
Processed at establishments classified in other mineral industries and in manufacturing industries.....	(NA)	533	14,396	(NA)	<sup>3</sup> 601	<sup>3</sup> 16,451
West:						
Crude barite:						
Production and shipments.....	136	86	647	66	67	240
Prepared barite (crushed or ground, including flotation concentrates).....	(NA)	92	2,037	(NA)	<sup>2</sup> 58	<sup>2</sup> 1,364
FLUORSPAR						
United States:						
Crude fluorspar:						
Production and shipments.....	595	116	906	836	96	1,785
Mined and prepared at same establishment.....	450	(X)	(X)	734	(X)	(X)
Received from other establishments for preparation.....	(X)	266	3,339	(X)	187	3,338
Prepared fluorspar (crushed or ground, including flotation concentrates):						
Production and shipments.....	296	293	12,471	368	366	16,996
Northeast and North Central:						
Crude fluorspar:						
Production and shipments.....	434	7	80	480	58	869
Mined and prepared at same establishment.....	397	(X)	(X)	403	(X)	(X)
Received from other establishments for preparation.....	(X)	15	284	(X)	70	1,051
Prepared fluorspar (crushed or ground, including flotation concentrates):						
Production and shipments.....	139	139	7,032	163	162	7,862
South:						
Prepared fluorspar (crushed or ground, including flotation concentrates):						
Production and shipments.....	123	123	4,556	82	84	3,822
Mountain:						
Prepared fluorspar (crushed or ground, including flotation concentrates):						
Production and shipments.....	34	31	883	123	120	5,312
POTASH, SODA, AND BORATE MINERALS						
United States:						
Potassium salts:						
Crude salts.....	<sup>4</sup> 16,714	( <sup>5</sup> )	( <sup>5</sup> )	<sup>4</sup> 12,224	( <sup>5</sup> )	( <sup>5</sup> )
Processed or refined salts.....	4,515	<sup>6</sup> 4,608	<sup>6</sup> 104,209	3,710	<sup>5</sup> 4,002	<sup>5</sup> 82,468
Natural sodium carbonates.....	(NA)	1,107	26,595	(NA)	639	17,175
Natural sodium sulfate.....	(NA)	432	8,778	(NA)	344	6,495
Boron compounds.....	(NA)	723	46,942	(NA)	<sup>7</sup> 559	<sup>7</sup> 32,275

See footnotes at end of table.

TABLE 6A. Primary Products of the Industry, by Geographic Areas: 1963 and 1958—Continued

Product and geographic area	1963			1958		
	Total production <sup>1</sup>	Total shipments (including interplant transfers) or receipts		Total production <sup>1</sup>	Total shipments (including interplant transfers) or receipts	
		Quantity <sup>1</sup>	Value		Quantity <sup>1</sup>	Value
	(1,000 tons)	(1,000 tons)	(\$1,000)	(1,000 tons)	(1,000 tons)	(\$1,000)
PHOSPHATE ROCK						
United States:						
Production and shipments:						
Crude phosphate rock (ore or matrix), total.....	63,403	3,703	10,897	46,031	3,162	8,922
Shipped to washer or concentrator.....	(X)	2,463	3,593	(X)	1,817	3,781
All other shipments.....	(X)	1,240	7,304	(X)	1,345	5,141
Washed or concentrated phosphate rock, total.....	18,006	10,218	43,396	12,636	8,492	41,607
Shipped to drier.....	(X)	7,563	27,770	(X)	6,049	29,152
All other shipments.....	(X)	2,655	15,626	(X)	2,443	12,455
Dried phosphate rock.....	14,327	14,389	81,159	11,747	11,817	81,440
Calcined or sintered phosphate rock.....	2,609	2,559	26,206			
Net shipments of phosphate rock <sup>8</sup> .....	(X)	20,843	130,295			
Phosphate rock washed or dried:						
Produced and used at same establishment.....	59,645	(X)	(X)	42,670	(X)	(X)
Received from other establishments for washing or drying.....	(X)	8,825	33,623	(X)	8,289	41,864
East and South:						
Production and shipments:						
Crude phosphate rock (ore or matrix).....	60,641	2,654	4,170	43,727	1,529	2,190
Washed or concentrated phosphate rock.....	17,268	25,685	138,286	12,035	19,667	118,513
Dried, or calcined phosphate rock.....	16,195			11,242		
Net shipments of phosphate rock <sup>8</sup> .....	(X)			(X)		
Phosphate rock washed or dried.....	<sup>9</sup> 66,360	(X)	(X)	<sup>9</sup> 50,121	(X)	(X)
South Atlantic (Florida):						
Production and shipments:						
Crude phosphate rock (ore or matrix).....	54,419	20	31,951	40,115	80	557
Washed or concentrated phosphate rock.....	15,268	8,812		10,669	7,645	37,733
Dried or calcined phosphate rock.....	15,015	15,017		10,227	10,273	66,003
Net shipments of phosphate rock <sup>8</sup> .....	(X)	<sup>10</sup> 16,402	<sup>10</sup> 91,461	(X)	12,136	75,888
Phosphate rock washed or dried:						
Produced and used at same establishment.....	54,375	(X)	(X)	40,047	(X)	(X)
Received from other establishments for washing or drying.....	(X)	8,286	30,308	(X)	7,481	38,655
East South Central (Tennessee):						
Production and shipments:						
Crude phosphate rock (ore or matrix).....	6,222	2,634	3,972	3,612	1,449	1,633
Washed or concentrated phosphate rock.....	1,921	1,777	19,468	1,366	1,668	13,667
Dried, calcined, or sintered phosphate rock.....	1,180			934		
Net shipments of phosphate rock <sup>8</sup> .....	(X)			(X)		
West:						
Production and shipments:						
Crude phosphate rock (ore or matrix).....	2,762	1,049	6,727	2,304	1,633	6,732
Washed or concentrated phosphate rock.....	738	1,481	12,475	601	642	4,534
Dried, calcined, or sintered phosphate rock.....	741			505		
Net shipments of phosphate rock <sup>8</sup> .....	(X)			(X)		
Phosphate rock washed or dried.....	<sup>9</sup> 2,110	(X)	(X)	<sup>9</sup> 838	(X)	(X)
ROCK SALT						
United States, total.....	(NA)	<sup>7</sup> 8,769	<sup>7</sup> 58,207	(NA)	<sup>7</sup> 5,445	<sup>7</sup> 40,525
Northeast and North Central.....	(NA)	5,562	32,831	(NA)	3,583	24,495
West South Central.....	(NA)	2,925	24,271	(NA)	1,585	14,638
West.....	(NA)	<sup>7</sup> 282	<sup>7</sup> 1,105	(NA)	<sup>7</sup> 277	<sup>7</sup> 1,392
SULFUR						
United States <sup>11</sup> .....	4,883	4,923	113,091	4,654	4,619	106,200
CHEMICAL AND FERTILIZER MINING, N.E.C.						
United States <sup>12</sup> .....	(X)	(X)	<sup>7</sup> 13,229	(X)	(X)	<sup>7</sup> 10,826

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified. n.s.k. Not specified by kind.

<sup>1</sup>Represents long tons (2,240 pounds) for phosphate rock and sulfur; and short tons (2,000 pounds) for all other products.

<sup>2</sup>Represents net shipments obtained by subtracting minerals received for preparation from gross shipments.

<sup>3</sup>Figures for South Atlantic are included with those for South Central.

<sup>4</sup>Represents production from underground mines only. Does not include production from well brines or dry-lake brines; only shipments were reported for such operations.

<sup>5</sup>Crude salts are included with processed or refined salts.

<sup>6</sup>Represents net shipments obtained from gross shipments of crude and processed or refined salts by subtracting shipments of crude salts to other establishments for processing or refining. See also footnote 5.

<sup>7</sup>Represents net shipments obtained from gross shipments by subtracting minerals received from other establishments for preparation.

<sup>8</sup>Represents "All other shipments" of crude and washed or concentrated phosphate rock plus shipments of dried and calcined or sintered phosphate rock.

<sup>9</sup>Represents the combination of phosphate rock produced and washed or dried at the same establishment and phosphate rock received from other establishments for washing or drying.

<sup>10</sup>Includes figures for phosphate rock mined, washed, or concentrated in Pennsylvania, Arkansas, Louisiana, and Texas, amounting to less than 5 percent of this total.

<sup>11</sup>Represents Frasch process sulfur and sulfur ore, the latter amounting for 1963 to only about one thousand tons valued at \$15 thousand dollars.

<sup>12</sup>Represents pyrites and such other miscellaneous chemical and fertilizer minerals as spodumene, wollastonite, and natural wollastonite, and natural iron oxide pigments.

**TABLE 6B. Product Classes—Indexes of Production and Unit Value for Primary Products Shipped by All Producers: 1963 and 1958**

Product code	Product and year	Indexes (1954 = 100)	
		Production	Unit value
147--	Chemical and fertilizer minerals <sup>1</sup> .....	1963.. 131	96
	1958..	105	98
1472-	Barite.....	1963.. 92	99
	1958..	72	106
14721	Crude barite shipped.....	1963.. 101	139
14722	Prepared barite produced in the barite industry..	1958.. 56	98
	1963..	91	92
	1958..	75	107
1473-	Fluorspar <sup>2</sup> .....	1963.. 91	86
	1958..	127	93
1474-	Potash, soda, and borate minerals <sup>3</sup> .....	1963.. 171	103
	1958..	136	97
14742	Potassium salts.....	1963.. 141	103
	1958..	122	94
14743	Sodium carbonates and sulfate.....	1963.. 195	101
	1958..	122	108
1475-	Phosphate rock (net shipments).....	1963.. 144	96
	1958..	105	104
14751	Crude phosphate rock (gross production).....	1963.. 137	94
	1958..	99	90
14752	Washed or concentrated phosphate rock (gross production).....	1963.. 159	119
	1958..	112	137
14753	Dried, calcined, or sintered phosphate rock.....	1963.. 157	92
	1958..	109	100
1476-	Rock salt.....	1963.. 180	98
	1958..	112	110
1477-	Sulfur.....	1963.. 85	90
	1958..	81	90

<sup>1</sup>Adjusted to include industry 1479, for which separate figures are not shown.

<sup>2</sup>Production index is based on crude fluorspar produced; unit value index is based on shipment of prepared fluorspar.

<sup>3</sup>Adjusted to include boron compounds, for which separate statistics are not shown.

TABLE 6C. Shipments of Primary Products Distributed by Value Per Ton: 1963

Product and average value per ton f.o.b. mine or plant <sup>1</sup>	Quantity shipped		Value of shipments	
	Tons <sup>2</sup> (1,000)	Percent of total quantity	Value (\$1,000)	Percent of total value
<b>BARITE</b>				
Crude barite, total.....	268	100.0	3,589	100.0
Less than \$10.00.....	82	30.6	532	14.8
\$10.00 to \$12.50.....	32	11.9	350	9.8
\$12.51 to \$17.90.....	101	37.7	1,666	46.4
\$17.91 and over.....	53	19.8	1,041	29.0
Prepared barite from establishments classified in the barite industry (net shipments), total.....	564	100.0	12,803	100.0
Less than \$15.91.....	75	13.3	925	7.2
\$15.91 and over.....	489	86.7	11,878	92.8
<b>FLUORSPAR</b>				
Crude fluorspar, total.....	116	100.0	906	100.0
Less than \$14.11.....	110	94.8	785	86.6
\$14.11 and over.....	6	5.2	121	13.4
Prepared fluorspar, total.....	293	100.0	12,471	100.0
Less than \$33.41.....	33	11.3	749	6.0
\$33.41 to \$48.40.....	195	66.5	7,594	60.9
\$48.41 and over.....	65	22.2	4,128	33.1
<b>POTASH, SODA, AND BORATE MINERALS</b>				
Potassium salts (net shipments), total.....	4,608	100.0	104,209	100.0
Less than \$22.91.....	2,661	57.7	57,437	55.1
\$22.91 and over.....	1,947	42.3	46,772	44.9
<b>PHOSPHATE ROCK</b>				
Crude phosphate rock, total.....	3,703	100.0	10,897	100.0
Less than \$2.05.....	2,084	56.3	2,636	24.2
\$2.05 and over.....	1,619	43.7	8,261	75.8
Washed or concentrated phosphate rock, total.....	10,218	100.0	43,396	100.0
Less than \$3.80.....	5,386	52.8	15,845	36.5
\$3.80 to \$6.14.....	3,927	38.4	18,335	42.3
\$6.15 and over.....	905	8.8	9,216	21.2
Dried, calcined, or sintered phosphate rock, total.....	16,948	100.0	107,365	100.0
Less than \$6.95.....	10,326	60.9	49,751	46.3
\$6.95 and over.....	6,622	39.1	57,614	53.7
<b>ROCK SALT</b>				
Rock salt (net shipments), total.....	8,769	100.0	58,207	100.0
Less than \$6.15.....	3,827	43.6	19,511	33.5
\$6.15 to \$9.99.....	3,990	45.5	26,945	46.3
\$10.00 and over.....	952	10.9	11,751	20.2

<sup>1</sup>The "average values" are based on the entire shipments of the specified product by each establishment. Thus they are representative of varied average prices among establishments, but not of variations within an establishment.

<sup>2</sup>For barite, fluorspar, potassium salts, and rock salt, represents short tons; for phosphate rock, represents long tons.

TABLE 7A. Supplies Used in the Industries: 1963 and 1958

(Detailed figures for the quantity and cost of supplies used were not obtained for these industries. For the total cost of supplies used, see table 3. For the quantity and cost of minerals received for preparation, see table 6A. For the quantity and total cost of purchased fuels and electricity used, see table 3.)

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954

Ind. code	Industry, geographic area, and type of operation	Aggregate horsepower per production worker (1,000 hp.)		1963 (1,000 hp.)									
				Aggregate horsepower (prime movers and electric motors driven by purchased energy)					Prime movers (horsepower)				
		1963	1954	Total	Loading equipment	Transportation equipment		All other equipment	Total	Loading equipment	By type of equipment		All other equipment
						Highway- type	Other				Highway- type	Other	
1472	BARITE.....  <u>Geographic Area</u>  West North Central (Missouri).... South..... South Central.....  <u>Type of Operation</u>  Producing open-pit mines with preparation plants..... 1473 FLUORSPAR.....  <u>Geographic Area</u>  Northeast and North Central..... South.....  <u>Type of Operation</u>  Producing underground mines with preparation plants..... Producing preparation plants only. 1474 POTASH, SODA, AND BORATE MINERALS, TOTAL.....  <u>Geographic Area</u>  West South Central and Mountain... New Mexico..... Pacific.....  <u>Type of Operation</u>  Producing underground mines with preparation plants..... 1475 PHOSPHATE ROCK, TOTAL.....  <u>Geographic Area</u>  East and South..... Florida..... Tennessee..... West.....  <u>Type of Operation</u>  Producing open-pit mines, total... Without preparation plants..... With preparation plants..... Producing preparation plants only. 1476 ROCK SALT, TOTAL.....  <u>Geographic Area</u>  Northeast and North Central..... South and West..... 1477 SULFUR..... 1479 CHEMICAL AND FERTILIZER MINING, N.E.C.....	66  69 58 54   64 35  34 34  31 78 68  57 52 94  51 131  145 158 96 75  145 126 146 150 58  76 40 94 51	65  74 58 (NA)   84 49  48 34  48 46 41  36 33 52  (NA) 78  83 80 96 44  93 80 93 51 29  33 24 52 44	60  23 31 22   35 24  16 6  17 5 330  187 141 143  158 525  467 401 60 58  433 26 407 61 106  70 36 151 39	9  5 2 1   6 1  1 (Z)  1 (Z) 21  12 7 9  8 75  62 49 12 13  63 10 53 6 8 10  4	18  6 11 5   14 3  1 2  1 2 50  34 27 16  31 98  85 61 22 13  80 8 72 11 10  3 3	8  5 3 3    3 1 (Z) (Z)  1 (Z) 38  22 19 16  22 22 11  23 6 20 2  24 6 93 30	25  7 15 13    12 18  13 4  14 3 221  119 88 102  97 319  298 269 26 21  267 2 265 38 64  41 23 93 30	40  17 18 11    24 11  8 2  167  75 49 92  65 169  131 91 35 38  134 24 110 21 46  23 23 150 9	9  5 2 1    6 1  (Z) (Z) 14  5 1 (Z) 2  39  26 13 12 13  30 10 20 6 2  2 (Z) 6 3	18  6 11 5    14 3  1 2  1 (Z) 200 50  34 27 16  31 98  85 61 22 13  80 8 72 11 10  3 5 32 3	8  5 3 3    3 1 (Z) (Z)  21  5 10 - 10  15 6 9 3 10  8 2 20 2	5  1 2 2    1 6  6 (Z) 82  31 17 51  27 12  10 7 1 2  9 (Z) 9 1 24  8 16 92 1

See footnotes at end of table.

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954—Continued

Ind. code	Industry, geographic area, and type of operation	1963 (1,000 hp.)—Continued							
		Prime movers (horsepower)—Continued		Electric motors (horsepower)					
		By use		Total	By type of equipment			By source of energy	
		Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated at same establishment
1472	BARITE.....	1	39	20	(Z)	(Z)	20	20	(Z)
	<u>Geographic Area</u>								
	West North Central (Missouri)....	(Z)	17	6	-	-	6	6	(Z)
	South.....	1	17	13	(Z)	(Z)	13	13	-
	South Central.....	1	10	11	(Z)	-	11	11	-
	<u>Type of Operation</u>								
	Producing open-pit mines with preparation plants.....	(Z)	24	11	-	(Z)	11	11	(Z)
1473	FLUORSPAR.....	5	6	19	(Z)	1	18	13	6
	<u>Geographic Area</u>								
	Northeast and North Central.....	5	3	14	(Z)	1	13	8	6
	South.....	-	2	4	-	(Z)	4	4	-
	<u>Type of Operation</u>								
	Producing underground mines with preparation plants.....	5	3	15	(Z)	1	14	9	6
	Producing preparation plants only.	-	2	3	-	-	3	3	-
1474	POTASH, SODA, AND BORATE MINERALS, TOTAL.....	66	101	244	10	25	209	163	81
	<u>Geographic Area</u>								
	West South Central and Mountain...	26	49	160	10	25	125	112	48
	New Mexico.....	15	34	126	7	22	97	92	34
	Pacific.....	40	52	84	(Z)	(Z)	84	51	33
	<u>Type of Operation</u>								
	Producing underground mines with preparation plants.....	24	41	141	9	25	107	93	48
1475	PHOSPHATE ROCK, TOTAL.....	10	159	356	36	13	307	356	(Z)
	<u>Geographic Area</u>								
	East and South.....	10	121	336	36	12	288	336	(Z)
	Florida.....	6	85	310	36	12	262	310	(Z)
	Tennessee.....	3	32	25	-	-	25	25	(Z)
	West.....	(Z)	38	20	(Z)	1	19	20	-
	<u>Type of Operation</u>								
	Producing open-pit mines, total...	10	124	299	33	8	258	299	(Z)
	Without preparation plants.....	(Z)	24	2	(Z)	-	2	2	(Z)
	With preparation plants.....	10	100	297	33	8	256	297	-
	Producing preparation plants only.	-	21	40	(Z)	3	37	40	-
1476	ROCK SALT, TOTAL.....	5	41	62	6	14	42	60	2
	<u>Geographic Area</u>								
	Northeast and North Central.....	3	20	47	4	10	33	47	-
	South and West.....	2	21	15	2	4	9	13	2
1477	SULFUR.....	33	117	31	4	2	25	1	30
1479	CHEMICAL AND FERTILIZER MINING, N.E.C.....	(Z)	9	30	1	-	29	30	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified. (Z) Less than one-half of the unit of measure specified.



TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with average employment of—						
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
GROUP 147.—CHEMICAL AND FERTILIZER MINERALS								
Number of establishments, total.....	235	154	32	30	11	8	-	-
Number reporting water use, total.....	160	79	32	30	11	8	-	-
By source of water:								
Utility.....	26	14	3	7	1	1	-	-
Other than utility.....	117	53	24	23	10	7	-	-
Source not specified.....	17	12	5	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....	58	46	10	2	-	-	-	-
1-9 million gallons.....	12	8	3	-	-	1	-	-
10-19 million gallons.....	5	1	1	2	1	-	-	-
20-99 million gallons.....	18	8	3	5	1	1	-	-
100 million gallons and over.....	67	16	15	21	9	6	-	-
Number of employees.....	21,040	1,423	2,695	4,969	4,529	7,424	-	-
Number at establishments reporting water use.....	20,823	1,206	2,695	4,969	4,529	7,424	-	-
Value added in mining.....\$1,000..	433,313	18,170	38,796	124,428	113,549	138,370	-	-
Value added at establishments reporting water use.....do....	431,284	16,141	38,796	124,428	113,549	138,370	-	-
INDUSTRY 1472.—BARITE								
Number of establishments, total.....	54	47	5	2	-	-	-	-
Number reporting water use, total.....	30	23	5	2	-	-	-	-
By source of water:								
Utility.....	5	2	1	2	-	-	-	-
Other than utility.....	22	19	3	-	-	-	-	-
Source not specified.....	3	2	1	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....	15	11	3	1	-	-	-	-
1-9 million gallons.....	2	2	-	-	-	-	-	-
20-99 million gallons.....	4	3	1	-	-	-	-	-
100 million gallons and over.....	9	7	1	1	-	-	-	-
Number of employees.....	1,434	396	<u>1,038</u>	(D)	-	-	-	-
Number at establishments reporting water use.....	1,372	334	<u>1,038</u>	(D)	-	-	-	-
Value added in mining.....\$1,000..	11,107	3,856	<u>7,251</u>	(D)	-	-	-	-
Value added at establishments reporting water use.....do....	10,262	3,011	<u>7,251</u>	(D)	-	-	-	-
INDUSTRY 1473.—FLUORSPAR								
Number of establishments, total.....	30	26	2	2	-	-	-	-
Number reporting water use, total.....	15	11	2	2	-	-	-	-
By source of water:								
Utility.....	5	4	-	1	-	-	-	-
Other than utility.....	7	4	2	1	-	-	-	-
Source not specified.....	3	3	-	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....	7	6	1	-	-	-	-	-
10-19 million gallons.....	1	1	-	-	-	-	-	-
20-99 million gallons.....	2	2	-	-	-	-	-	-
100 million gallons and over.....	5	2	1	2	-	-	-	-
Number of employees.....	804	228	<u>576</u>	(D)	-	-	-	-
Number at establishments reporting water use.....	743	167	<u>576</u>	(D)	-	-	-	-
Value added in mining.....\$1,000..	8,869	3,020	<u>5,849</u>	(D)	-	-	-	-
Value added at establishments reporting water use.....do....	8,226	2,377	<u>5,849</u>	(D)	-	-	-	-
INDUSTRY 1474.—POTASH, SODA, AND BORATE MINERALS								
Number of establishments, total.....	23	8	4	2	4	5	-	-
Number reporting water use, total.....	20	5	4	2	4	5	-	-
By source of water:								
Utility.....	1	-	-	-	-	1	-	-
Other than utility.....	18	4	4	2	4	4	-	-
Source not specified.....	1	1	-	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....	3	3	-	-	-	-	-	-
1-9 million gallons.....	4	2	2	-	-	-	-	-
20-99 million gallons.....	2	-	1	-	-	1	-	-
100 million gallons and over.....	11	-	1	2	4	4	-	-
Number of employees.....	7,050	<u>651</u>	(D)	(D)	1,586	4,813	-	-
Number at establishments reporting water use.....	7,043	<u>644</u>	(D)	(D)	1,586	4,813	-	-
Value added in mining.....\$1,000..	156,151	<u>12,828</u>	(D)	(D)	48,785	94,538	-	-
Value added at establishments reporting water use.....do....	156,091	<u>12,768</u>	(D)	(D)	48,785	94,538	-	-

See footnotes at end of table.

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963-Continued

Item	Establishments, total	Establishments with average employment of—						
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
INDUSTRY 1475.—PHOSPHATE ROCK								
Number of establishments, total.....	66	37	13	11	4	1	-	-
Number reporting water use, total.....	55	26	13	11	4	1	-	-
By source of water:								
Utility.....	6	5	1	-	-	-	-	-
Other than utility.....	41	15	10	11	4	1	-	-
Source not specified.....	8	6	2	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....	17	15	2	-	-	-	-	-
1-9 million gallons.....	2	2	-	-	-	-	-	-
10-19 million gallons.....	1	-	1	-	-	-	-	-
20-99 million gallons.....	6	2	1	2	1	-	-	-
100 million gallons and over.....	29	7	9	9	3	1	-	-
Number of employees.....	5,624	471	1,039	1,401	2,713	(D)	-	-
Number at establishments reporting water use.....	5,585	432	1,039	1,401	2,713	(D)	-	-
Value added in mining.....\$1,000..	94,889	6,609	21,178	33,685	33,417	(D)	-	-
Value added at establishments reporting water use.....do....	94,665	6,385	21,178	33,685	33,417	(D)	-	-
INDUSTRY 1476.—ROCK SALT								
Number of establishments, total.....	25	13	4	6	2	-	-	-
Number reporting water use, total.....	17	5	4	6	2	-	-	-
By source of water:								
Utility.....	5	2	-	2	1	-	-	-
Other than utility.....	12	3	4	4	1	-	-	-
By quantity of water intake:								
Under 1 million gallons.....	7	4	2	1	-	-	-	-
1-9 million gallons.....	2	1	1	-	-	-	-	-
10-19 million gallons.....	3	-	-	2	1	-	-	-
20-99 million gallons.....	3	-	-	3	-	-	-	-
100 million gallons and over.....	2	-	1	-	1	-	-	-
Number of employees.....	2,443	134	356	1,953	(D)	-	-	-
Number at establishments reporting water use.....	2,431	122	356	1,953	(D)	-	-	-
Value added in mining.....\$1,000..	49,539	3,114	3,730	42,695	(D)	-	-	-
Value added at establishments reporting water use.....do....	49,424	2,999	3,730	42,695	(D)	-	-	-
INDUSTRY 1477.—SULFUR								
Number of establishments, total.....	17	7	1	7	1	1	-	-
Number reporting water use, total.....	11	1	1	7	1	1	-	-
By source of water:								
Utility.....	4	1	1	2	-	-	-	-
Other than utility.....	7	-	-	5	1	1	-	-
By quantity of water intake:								
Under 1 million gallons.....	1	1	-	-	-	-	-	-
100 million gallons and over.....	10	-	1	7	1	1	-	-
Number of employees.....	2,603	2,603	(D)	(D)	(D)	(D)	-	-
Number at establishments reporting water use.....	2,593	2,593	(D)	(D)	(D)	(D)	-	-
Value added in mining.....\$1,000..	100,349	100,349	(D)	(D)	(D)	(D)	-	-
Value added at establishments reporting water use.....do....	100,347	100,347	(D)	(D)	(D)	(D)	-	-
INDUSTRY 1479.—CHEMICAL AND FERTILIZER MINING, N.E.C.								
Number of establishments, total.....	20	16	3	-	-	1	-	-
Number reporting water use, total.....	12	8	3	-	-	1	-	-
By source of water:								
Other than utility.....	10	8	1	-	-	1	-	-
Source not specified.....	2	-	2	-	-	-	-	-
By quantity of water intake:								
Under 1 million gallons.....	8	6	2	-	-	-	-	-
1-9 million gallons.....	2	1	-	-	-	1	-	-
20-99 million gallons.....	1	1	-	-	-	-	-	-
100 million gallons and over.....	1	-	1	-	-	-	-	-
Number of employees.....	1,082	1,082	(D)	-	-	(D)	-	-
Number at establishments reporting water use.....	1,056	1,056	(D)	-	-	(D)	-	-
Value added in mining.....\$1,000..	12,409	12,409	(D)	-	-	(D)	-	-
Value added at establishments reporting water use.....do....	12,269	12,269	(D)	-	-	(D)	-	-

- Represents zero.

(D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.

n.e.c. Not elsewhere classified.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963

Type of operation and tons per man-hour <sup>1</sup>	Establishments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expenditures
		Total	Payroll	Total	Man-hours	Wages			
	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
INDUSTRY 1472.—BARITE									
All establishments, total.....	54	1,434	6,799	911	1,887	3,605	11,107	16,668	1,101
Less than 0.20.....	8	178	521	162	267	417	460	697	235
0.20 to 0.39.....	13	451	1,659	390	811	1,530	4,215	6,326	277
0.40 to 0.69.....	8	307	1,589	268	605	1,327	4,803	6,080	458
0.70 and over.....	7	48	194	38	75	156	732	1,164	14
Undistributed <sup>2</sup> .....	18	450	2,836	53	129	175	897	2,401	117
INDUSTRY 1473.—FLUORSPAR									
All establishments, total.....	30	804	3,981	682	1,346	3,037	8,869	15,792	313
Less than 0.20.....	5	488	2,367	423	848	1,864	5,336	7,540	84
0.20 to 0.69.....	9	169	832	152	301	721	1,996	3,816	190
0.80 and over.....	5	51	286	38	64	194	679	3,152	27
Undistributed <sup>2</sup> .....	11	96	496	69	133	258	858	1,284	12
INDUSTRY 1474.—POTASH, SODA, AND BORATE MINERALS									
All establishments, total.....	23	7,050	51,859	4,822	9,849	32,901	156,151	192,116	26,773
Less than 0.60.....	10	3,846	27,358	2,974	6,179	20,012	87,617	111,326	7,048
0.80 to 0.99.....	4	1,269	9,240	949	1,899	6,601	32,141	35,058	5,113
1.00 and over.....	3	1,128	8,160	827	1,620	5,677	36,768	45,732	3,880
Undistributed <sup>2</sup> .....	6	807	7,101	72	151	611	( <sup>3</sup> )		10,732
INDUSTRY 1475.—PHOSPHATE ROCK									
All establishments, total.....	66	5,624	31,955	3,996	9,047	20,642	94,889	161,658	22,234
Less than 0.80.....	8	199	799	185	444	726	1,168	1,755	75
1.00 to 1.79.....	7	229	1,309	205	399	1,081	2,268	5,635	277
1.80 to 2.39.....	7	849	4,485	718	1,614	3,610	12,203	17,113	10,222
2.40 to 2.99.....	4	694	3,778	555	1,414	2,824	14,346	21,882	648
3.00 to 3.99.....	6	890	5,347	709	1,731	3,761	18,089	25,259	911
5.00 to 7.99.....	5	444	1,526	314	805	1,007	12,987	22,093	1,431
8.00 and over.....	5	379	1,436	303	579	1,144	10,970	34,764	499
Undistributed <sup>2</sup> .....	24	1,940	13,275	1,007	2,061	6,489	22,858	33,157	8,171
Producing open-pits with preparation plants, total.....	31	3,400	18,805	2,779	6,706	14,503	67,718	97,683	15,051
Less than 1.59.....	6	246	1,153	229	543	1,001	1,723	2,395	79
1.60 to 2.39.....	7	860	4,557	729	1,639	3,674	12,271	17,089	10,323
2.40 to 2.99.....	4	694	3,778	555	1,414	2,824	14,346	21,882	648
3.00 and over.....	9	1,600	9,317	1,266	3,110	7,004	39,378	56,317	4,001
Undistributed <sup>2</sup> .....	5								
INDUSTRY 1476.—ROCK SALT									
All establishments, total.....	25	2,443	15,955	1,812	4,260	11,142	49,539	59,297	7,401
Less than 1.19.....	9	488	2,868	421	1,016	2,286	6,488	8,337	365
1.20 to 2.39.....	6	1,112	7,156	946	2,145	5,772	23,158	29,415	3,289
2.40 and over.....	5	521	3,762	443	1,095	3,079	19,828	21,449	3,741
Undistributed <sup>2</sup> .....	5	322	2,169	2	4	5	65	96	6

<sup>1</sup>Represents tons of primary products of the industry shipped per man-hour worked by production, development, and exploration workers. For phosphate rock represents long tons, for all other products represents short tons.

<sup>2</sup>Represents nonproducing establishments and establishments with no production, development, or exploration worker man-hours, with man-hours spent on exploration or development work amounting to 30 percent or more of total man-hours of production, development, and exploration workers, with cost of contract work amounting to 30 percent or more of production, development, and exploration worker wages, or with number of working proprietors amounting to 30 percent or more of number of production, development, and exploration workers. Also, includes figures for the number and payroll of employees at separately reported central offices and related facilities.

<sup>3</sup>Not shown since cost of supplies, fuels, purchased electric energy, contract work, and purchased machinery installed exceeds value of shipments and receipts plus capital expenditures.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963

Geographic division and ratio of payroll to value added in mining <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
INDUSTRY 1472.—BARITE									
United States, total.....	54	1,434	6,799	911	1,887	3,605	11,107	16,668	1,101
Less than 0.20.....	6	24	64	21	40	56	394	391	85
0.20 - 0.29.....	7	160	603	140	297	556	2,247	3,141	173
0.30 - 0.39.....	8	408	1,906	352	793	1,583	5,691	7,723	440
0.40 - 0.49.....	3	139	564	119	269	458	1,236	2,610	84
0.50 - 0.59.....	3								
0.60 - 0.69.....	3								
0.70 - 0.79.....	2	234	748	201	339	707	1,143	2,024	107
1.00 and over.....	8	82	315	75	142	237	149	338	131
Undistributed <sup>2</sup> .....	14	387	2,599	3	7	8	247	441	81
INDUSTRY 1473.—FLUORSPAR									
United States, total.....	30	804	3,981	682	1,346	3,037	8,869	15,792	313
0.10 - 0.19.....	2	78	370	61	125	264	1,884	3,791	11
0.20 - 0.29.....	2								
0.30 - 0.39.....	3								
0.40 - 0.49.....	10	539	2,656	460	920	2,050	5,924	10,257	83
0.50 - 0.59.....	3								
0.60 - 0.69.....	1								
0.70 - 0.79.....	1	187	955	161	301	723	1,061	1,744	219
0.80 - 0.89.....	1								
1.00 and over.....	3								
Undistributed <sup>2</sup> .....	4								
INDUSTRY 1474.—POTASH, SODA, AND BORATE MINERALS									
United States, total.....	23	7,050	51,859	4,822	9,849	32,901	156,151	192,116	26,773
0.10 - 0.19.....	3	2,302	16,432	1,774	3,539	12,137	80,729	93,344	9,815
0.20 - 0.29.....	5								
0.30 - 0.39.....	4								
0.40 - 0.49.....	2	2,844	20,065	2,188	4,545	14,714	58,931	74,621	4,718
0.50 - 0.59.....	2								
1.00 and over.....	3								
Undistributed <sup>2</sup> .....	4	1,904	15,362	860	1,765	6,050	16,491	24,151	12,240
INDUSTRY 1475.—PHOSPHATE ROCK									
United States, total.....	66	5,624	31,955	3,996	9,047	20,642	94,889	161,658	22,234
Less than 0.20.....	13	993	4,161	765	1,761	3,162	32,250	66,440	3,828
0.20 - 0.29.....	17	1,611	9,341	1,371	3,129	7,595	37,537	57,689	11,528
0.30 - 0.39.....	5	745	4,466	601	1,442	3,143	12,873	18,110	975
0.40 - 0.49.....	2								
0.50 - 0.59.....	6								
0.60 - 0.69.....	6	549	2,991	460	956	2,388	5,555	8,418	597
0.70 - 0.79.....	6	311	1,712	270	522	1,401	2,654	3,796	445
0.80 - 0.89.....	4	415	2,517	377	870	2,235	3,192	4,596	4,261
0.90 - 0.99.....	5	1,000	6,767	152	367	718	828	2,609	600
1.00 and over.....	1								
Undistributed <sup>2</sup> .....	3								
East and South, total.....	53	4,720	26,073	3,220	7,420	15,856	81,502	142,456	16,568
Less than 0.10.....	2	3,065	16,111	2,502	5,828	12,452	74,628	130,011	15,321
0.10 - 0.19.....	9								
0.20 - 0.29.....	16								
0.30 - 0.39.....	4	467	2,420	391	819	1,913	4,602	7,203	476
0.40 - 0.49.....	1								
0.50 - 0.59.....	5								
0.60 - 0.69.....	3	1,188	7,542	327	773	1,491	2,272	5,242	771
0.70 - 0.79.....	3								
0.80 - 0.89.....	5								
0.90 - 0.99.....	1	1,188	7,542	327	773	1,491	2,272	5,242	771
1.00 and over.....	2								
Undistributed <sup>2</sup> .....	2								
INDUSTRY 1476.—ROCK SALT									
United States, total.....	25	2,443	15,955	1,812	4,260	11,142	49,539	59,297	7,401
0.10 - 0.19.....	4	1,199	7,362	1,045	2,430	6,160	34,855	41,336	5,072
0.20 - 0.29.....	5								
0.30 - 0.39.....	4								
0.40 - 0.49.....	1	521	3,495	431	1,048	2,718	6,594	8,189	1,895
0.50 - 0.59.....	4								
0.60 and over.....	3								
Undistributed <sup>2</sup> .....	4	321	2,165	1	2	1	43	66	5

Footnotes on next page.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963—Continued

Footnotes for Table 9-14E

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
<sup>1</sup>In computing these ratios contract employment serving the establishment is excluded. The cost of contract work expressed as a percent of payroll for 1963 was as follows: For barite, 14 percent; for fluorspar, 8 percent; for potash, soda, borate minerals, 15 percent; for phosphate rock, 30 percent; for rock salt, 3 percent; for sulfur, 2 percent; and for chemical and fertilizer mining, n.e.c., 1 percent.  
Distributions for two industries are withheld to avoid disclosing figures for individual companies. The following table shows the number of establishments by ratio of payroll to value added in mining for these industries:

Ratio of payroll to value added in mining	1477	1479
United States, total.....	17	20
Less than 0.10.....	2	1
0.10 to 0.19.....	4	1
0.20 to 0.29.....	3	1
0.30 to 0.39.....	-	1
0.40 to 0.49.....	2	3
0.50 to 0.99.....	-	4
1.00 and over.....	-	2
Undistributed <sup>2</sup> .....	6	7

n.e.c. Not elsewhere classified.

<sup>2</sup>Represents establishments with zero or negative value added; establishments with no employees; and for number of employees and payroll, figures for separately reported central offices and related facilities.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963

Value added per employee class <sup>1</sup>	Number of employees	Number of establishments with average employment of--							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1472.—BARITE									
Total.....	1,434	54	41	6	5	2	-	-	-
Less than \$3,000.....	134	9	7	1	1	-	-	-	-
\$3,000 to \$3,999.....	20	3	3	-	-	-	-	-	-
\$5,000 to \$5,999.....	37	3	2	1	-	-	-	-	-
\$6,000 to \$6,999.....	170	3	1	1	-	1	-	-	-
\$8,000 to \$8,999.....	180	2	1	1	-	-	-	-	-
\$9,000 to \$9,999.....	3	3	1	-	2	-	-	-	-
\$10,000 to \$12,499.....	181	1	5	1	1	-	-	-	-
\$12,500 to \$14,999.....	28	4	4	-	-	-	-	-	-
\$15,000 to \$17,499.....	278	3	1	1	-	1	-	-	-
\$17,500 to \$19,999.....	2	2	1	-	1	-	-	-	-
\$20,000 and over.....	22	3	3	-	-	-	-	-	-
Undistributed <sup>2</sup> .....	384	12	12	-	-	-	-	-	-
INDUSTRY 1473.—FLUORSPAR									
Total.....	804	30	23	3	2	2	-	-	-
Less than \$3,000.....	22	4	4	-	-	-	-	-	-
\$3,000 to \$3,999.....	16	2	2	-	-	-	-	-	-
\$5,000 to \$5,999.....	2	2	2	-	-	-	-	-	-
\$6,000 to \$6,999.....	140	3	1	1	1	-	-	-	-
\$8,000 to \$8,999.....	1	1	1	-	-	-	-	-	-
\$9,000 to \$9,999.....	511	1	1	-	-	-	-	-	-
\$10,000 to \$12,499.....	6	6	3	-	1	2	-	-	-
\$12,500 to \$14,999.....	36	2	1	1	-	-	-	-	-
\$15,000 to \$17,499.....	2	2	2	-	-	-	-	-	-
\$17,500 to \$19,999.....	59	4	3	1	-	-	-	-	-
\$20,000 and over.....	20	3	3	-	-	-	-	-	-
Undistributed <sup>2</sup> .....									
INDUSTRY 1474.—POTASH, SODA, AND BORATE MINERALS									
Total.....	7,050	23	7	1	4	2	4	5	-
\$5,000 to \$5,999.....	1	1	1	-	-	-	-	-	-
\$6,000 to \$6,999.....	90	1	1	-	-	-	-	-	-
\$10,000 to \$12,499.....	3	3	2	-	1	-	-	-	-
\$12,500 to \$14,999.....	1	1	-	-	-	-	-	1	-
\$15,000 to \$17,499.....	1,935	1	-	-	-	-	-	1	-
\$17,500 to \$19,999.....	2	2	-	-	1	1	-	-	-
\$20,000 and over.....	4,226	10	-	1	1	1	4	3	-
Undistributed <sup>2</sup> .....	799	4	3	-	1	-	-	-	-
INDUSTRY 1475.—PHOSPHATE ROCK									
Total.....	5,624	66	27	10	13	11	4	1	-
Less than \$3,000.....	42	3	2	1	-	-	-	-	-
\$3,000 to \$3,999.....	34	1	1	-	-	-	-	-	-
\$4,000 to \$4,999.....	3	3	3	-	-	-	-	-	-
\$5,000 to \$5,999.....	167	5	2	1	2	-	-	-	-
\$6,000 to \$6,999.....	34	3	2	1	-	-	-	-	-
\$7,000 to \$7,999.....	209	6	3	1	1	1	-	-	-
\$8,000 to \$8,999.....	369	5	4	-	-	-	1	-	-
\$9,000 to \$9,999.....	812	2	-	-	2	-	-	-	-
\$10,000 to \$12,499.....	8	8	3	1	3	-	1	-	-
\$12,500 to \$14,999.....	323	1	-	-	-	-	-	-	-
\$15,000 to \$17,499.....	3	3	-	1	-	2	-	-	-
\$17,500 to \$19,999.....	1,194	6	1	1	1	1	1	1	-
\$20,000 and over.....	1,616	17	3	2	4	7	1	-	-
Undistributed <sup>2</sup> .....	824	3	3	-	-	-	-	-	-
INDUSTRY 1476.—ROCK SALT									
Total.....	2,443	25	10	3	4	6	2	-	-
Less than \$3,000.....	1	1	1	-	-	-	-	-	-
\$4,000 to \$4,999.....	12	1	1	-	-	-	-	-	-
\$6,000 to \$6,999.....	2	2	2	-	-	-	-	-	-
\$7,000 to \$7,999.....	140	1	-	1	-	-	-	-	-
\$10,000 to \$12,499.....	2	1	1	-	1	-	-	-	-
\$12,500 to \$14,999.....	523	4	-	-	2	2	-	-	-
\$15,000 to \$17,499.....	1	1	-	-	1	-	-	-	-
\$17,500 to \$19,999.....	1,447	1	-	-	-	1	-	-	-
\$20,000 and over.....	8	8	1	2	-	3	2	-	-
Undistributed <sup>2</sup> .....	321	4	4	-	-	-	-	-	-

See footnotes at end of table.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963—Continued

Value added per employee class <sup>1</sup>	Number of employees	Number of establishments with employment of--							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees <sup>1</sup>	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1477.—SULFUR									
Total.....	2,603	17	7	-	1	7	1	1	-
\$3,000 to \$3,999.....	( <sup>3</sup> )	1	1	-	-	-	-	-	-
\$12,500 to \$14,999.....	( <sup>3</sup> )	1	-	-	-	1	-	-	-
\$20,000 and over.....	1,777	9	-	-	1	6	1	1	-
Undistributed <sup>2</sup> .....	826	6	6	-	-	-	-	-	-
INDUSTRY 1479.—CHEMICAL AND FERTILIZER MINING, N.E.C.									
Total.....	1,082	20	14	2	3	-	-	1	-
Less than \$3,000.....	90	2	2	-	-	-	-	-	-
\$4,000 to \$4,999.....		3	1	2	-	-	-	-	-
\$5,000 to \$5,999.....	31	1	1	-	-	-	-	-	-
\$6,000 to \$6,999.....		2	2	-	-	-	-	-	-
\$7,000 to \$7,999.....	1	-	-	-	1	-	-	-	-
\$8,000 to \$8,999.....		1	-	-	1	-	-	-	-
\$9,000 to \$9,999.....	828	-	-	-	-	-	-	-	-
\$10,000 to \$12,499.....		1	-	-	1	-	-	-	-
\$20,000 and over.....	133	2	1	-	-	-	-	1	-
Undistributed <sup>2</sup> .....		7	7	-	-	-	-	-	-

Standard Notes: -Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.  
<sup>1</sup>See table 9, footnote 1.  
<sup>2</sup>Represents establishments with no employees or with negative value added in mining and, for number of employees, figures for separately reported central offices and related facilities.  
<sup>3</sup>Figures for the class intervals \$3,000 to \$3,999 and \$12,500 to \$14,999 are included with "Undistributed."

**TABLE 11. Hourly Earnings of Production, Development, and Exploration Workers for Establishments with 10 or More Employees: 1963**

Industry by hourly earnings classes	Number of employees	Number of establishments with 10 or more employees in--									
		Total	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
INDUSTRY 1472.—BARITE											
Total.....	1,381	25	-	-	-	11	4	4	4	2	-
Less than \$1.49.....	198	7	-	-	-	2	2	3	-	-	-
\$1.50 - \$1.99.....	384	11	-	-	-	7	1	1	2	-	-
\$2.00 - \$2.49.....	1461	4	-	-	-	2	1	-	1	-	-
\$2.50 - \$2.99.....	1338	2	-	-	-	-	-	-	1	1	-
\$3.00 - \$3.49.....		1	-	-	-	-	-	-	-	1	-
INDUSTRY 1473.—FLUORSPAR											
Total.....	741	11	-	-	4	-	-	4	1	2	-
Less than \$1.99.....	42	3	-	-	-	-	-	2	-	1	-
\$2.00 - \$2.49.....	1699	8	-	-	4	-	-	2	1	1	-
INDUSTRY 1474.—POTASH, SODA, AND BORATE MINERALS											
Total.....	7,038	16	-	-	-	-	-	-	2	10	4
\$1.50 - \$1.99.....	1179	2	-	-	-	-	-	-	2	-	-
\$2.50 - \$2.99.....		1	-	-	-	-	-	-	-	1	-
\$3.00 - \$3.49.....	14,384	8	-	-	-	-	-	-	-	6	2
\$3.50 - \$3.99.....	12,475	4	-	-	-	-	-	-	-	2	2
\$4.00 - \$4.49.....		1	-	-	-	-	-	-	-	1	-
INDUSTRY 1475.—PHOSPHATE ROCK											
Total.....	5,531	45	-	1	-	-	24	10	1	9	-
Less than \$1.49.....	398	5	-	-	-	-	5	-	-	-	-
\$1.50 - \$1.99.....	12,253	11	-	-	-	-	7	4	-	-	-
\$2.00 - \$2.49.....	1,467	15	-	1	-	-	10	3	1	-	-
\$2.50 - \$2.99.....	1679	7	-	-	-	-	-	1	-	6	-
\$3.00 - \$3.49.....	335	4	-	-	-	-	-	1	-	3	-
\$3.50 - \$3.99.....	1399	1	-	-	-	-	-	1	-	-	-
\$4.50 and over.....		2	-	-	-	-	2	-	-	-	-
INDUSTRY 1476.—ROCK SALT											
Total.....	2,429	16	-	2	3	2	-	-	6	2	1
\$1.00 - \$1.49.....	1127	1	-	-	-	-	-	-	-	1	-
\$1.50 - \$1.99.....		2	-	-	-	-	-	-	2	-	-
\$2.00 - \$2.49.....	11,246	8	-	1	-	1	-	-	4	1	1
\$2.50 - \$2.99.....	11,056	1	-	1	-	-	-	-	-	-	-
\$3.00 - \$3.49.....		4	-	-	3	1	-	-	-	-	-
INDUSTRY 1477.—SULFUR											
Total.....	12,593	11	-	-	-	-	-	-	10	1	-
\$1.50 - \$1.99.....	311	1	-	-	-	-	-	-	-	1	-
\$2.50 - \$2.99.....		2	-	-	-	-	-	-	2	-	-
\$3.00 - \$3.49.....	1,636	4	-	-	-	-	-	-	4	-	-
\$3.50 - \$3.99.....		4	-	-	-	-	-	-	4	-	-
INDUSTRY 1479.—CHEMICAL AND FERTILIZER MINING, N.E.C.											
Total.....	1,062	9	-	3	-	-	3	1	-	2	-
Less than \$1.00.....	143	1	-	-	-	-	1	-	-	-	-
\$1.50 - \$1.99.....		2	-	-	-	-	1	-	-	1	-
\$2.00 - \$2.49.....	1919	4	-	2	-	-	1	-	-	1	-
\$2.50 - \$2.99.....		2	-	1	-	-	-	1	-	-	-

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

n.e.c. Not elsewhere classified.

Includes figures for separately reported central offices and related facilities.



TABLE 12. Distribution of Operating Companies, by Employment Size and by Number of Establishments: 1963

Establishment count	Number of--		Number of establishments with average employment of--									
	Operating companies	Employees	Total	0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
INDUSTRY 1472.—BARITE												
Total.....	45	1,434	54	25	4	12	6	5	2	-	-	-
Multiunit companies, total.....	8	1,105	17	3	3	3	2	4	2	-	-	-
1 establishment <sup>1</sup> .....	4	124	4	1	-	1	1	1	-	-	-	-
2 establishments.....	1		2	1	-	-	-	1	-	-	-	-
3 or 4 establishments.....	2	981	6	-	2	1	1	1	1	-	-	-
5 or 6 establishments.....	1		5	1	1	1	-	1	1	-	-	-
Single unit companies.....	37	329	37	22	1	9	4	1	-	-	-	-
INDUSTRY 1473.—FLUORSPAR												
Total.....	28	804	30	14	5	4	3	2	2	-	-	-
Multiunit companies, total.....	9	714	11	1	2	1	3	2	2	-	-	-
1 establishment <sup>1</sup> .....	7	714	7	1	2	1	1	-	2	-	-	-
2 establishments.....	2		4	-	-	-	2	2	-	-	-	-
Single unit companies.....	19	90	19	13	3	3	-	-	-	-	-	-
INDUSTRY 1474.—POTASH, SODA, AND BORATE MINERALS												
Total.....	19	7,050	23	7	-	-	1	4	2	4	5	-
Multiunit companies, total.....	14	6,817	18	4	-	-	-	4	1	4	5	-
1 establishment.....	11	3,866	11	2	-	-	-	4	-	2	3	-
2 establishments.....	2	2,951	4	1	-	-	-	-	1	2	-	-
3 or 4 establishments.....	1		3	1	-	-	-	-	-	-	2	-
Single unit companies.....	5	233	5	3	-	-	1	-	1	-	-	-
INDUSTRY 1475.—PHOSPHATE ROCK												
Total.....	43	5,624	66	10	11	6	10	13	11	4	1	-
Multiunit companies, total.....	16	5,263	39	1	1	3	7	11	11	4	1	-
1 establishment <sup>1</sup> .....	4	510	4	-	1	1	-	-	1	1	-	-
2 establishments.....	5	1,531	10	-	-	1	1	3	2	3	-	-
3 or 4 establishments.....	6	3,222	19	-	-	1	4	5	8	-	1	-
5 or 6 establishments.....	1		6	1	-	-	2	3	-	-	-	-
Single unit companies.....	27	361	27	9	10	3	3	2	-	-	-	-
INDUSTRY 1476.—ROCK SALT												
Total.....	20	2,443	25	8	1	1	3	4	6	2	-	-
Multiunit companies, total.....	8	2,148	13	-	-	-	2	4	5	2	-	-
1 establishment <sup>1</sup> .....	5	505	5	-	-	-	1	3	1	-	-	-
2 establishments.....	2	1,643	4	-	-	-	1	1	1	1	-	-
3 or 4 establishments.....	1		4	-	-	-	-	-	3	1	-	-
Single unit companies.....	12	295	12	8	1	1	1	-	1	-	-	-
INDUSTRY 1477.—SULFUR												
Total.....	11	2,603	17	6	-	1	-	1	7	1	1	-
Multiunit companies, total.....	4	2,581	10	-	-	-	-	1	7	1	1	-
1 establishment <sup>1</sup> .....	2	2,581	2	-	-	-	-	-	2	-	-	-
3 or 4 establishments.....	2		8	-	-	-	-	1	5	1	1	-
Single unit companies.....	7	22	7	6	-	1	-	-	-	-	-	-
INDUSTRY 1479.—CHEMICAL AND FERTILIZER MINING, N.E.C.												
Total.....	19	1,082	20	9	2	3	2	3	-	-	1	-
Multiunit companies, total.....	6	1,015	7	1	-	1	1	3	-	-	1	-
1 establishment <sup>1</sup> .....	5	1,015	5	-	-	-	1	3	-	-	1	-
2 establishments.....	1		2	1	-	1	-	-	-	-	-	-
Single unit companies.....	13	67	13	8	2	2	1	-	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.  
<sup>1</sup>Represents companies having at least one establishment classified in other industries.

## NONMETALLIC MINERALS (EXCEPT FUELS) SERVICES AND MISCELLANEOUS NONMETALLIC MINERALS

This report shows 1963 Census of Mineral Industries statistics for establishments classified in Industry Group 148, Nonmetallic Minerals (Except Fuels) Services, and Industry Group 149, Miscellaneous Nonmetallic Minerals, Except Fuels. The separate industries included in these two groups are as follows:

### SIC Code and Title

- 1481—Nonmetallic Minerals (Except Fuels) Services
- 1492—Gypsum
- 1493—Mica
- 1494—Native Asphalt and Bitumens
- 1495—Pumice and Pumicite
- 1496—Talc, Soapstone, and Pyrophyllite
- 1497—Natural Abrasives, Except Sand
- 1498—Peat
- 1499—Miscellaneous Nonmetallic Minerals, Not Elsewhere Classified

### NONMETALLIC MINERALS (EXCEPT FUELS) SERVICES

Industry 1481—Nonmetallic Minerals (Except Fuels) Services. This industry represents establishments primarily engaged in performing nonmetallic minerals (except fuels) services for others on a contract, fee, or other basis. The principal services performed in this industry are prospect, test, and other drilling; overburden stripping and strip mining; sinking mine shafts and driving mine tunnels; and exploration work. Establishments primarily engaged in performing hauling services are excluded from this industry and all other industries in the Mining Division.

Establishments classified in the Nonmetallic Minerals (Except Fuels) Services Industry were permitted to file one report for all mining services performed in the United States. These reports were classified on the basis of the principal type of service performed and the principal industry served to determine their industry or subindustry classification. Each report included data on the amount received for services and the number of employees in March by State and county. For geographic area statistics, all other figures in each report were allocated on the basis of these reported data.

The total receipts in the Nonmetallic Minerals (Except Fuels) Service Industry in 1963 amounted to \$13.2 million, of which, \$12.8 million were receipts for services primary to this industry, and \$0.5 million were for hauling and other services classified in other industries.

The services reported by these contractors represent only about 17 percent of all contract services performed for the industries in Major Group 14, Nonmetallic Minerals (Except Fuels) Mining. Operators of mining establishments in Major Group 14 reported receipts of \$12.3 million for contract services. It is probable that most of these receipts represented work for establishments classified in Major Group 14. In total, therefore, the census reports for Major Group 14 account for contract receipts amounting to about

\$25.5 million, or 33 percent of the total payments for contract work by establishments classified in Major Group 14. Much of the remaining contract work was probably hauling services and contract construction which are not within the scope of the 1963 economic censuses (manufactures, mineral industries, and business). The following table summarizes for groups of industries the available data on payments and receipts for contract services in Major Group 14 in 1963:

PAYMENTS AND RECEIPTS FOR SERVICES IN THE NONMETALLIC MINERALS MINING INDUSTRIES: 1963

Industry served	Cost of contract work as reported by mine operators (\$1,000)	Receipts for contract services (\$1,000)		
		Total	By nonmetallic minerals (except fuels) services industries	By mine operators classified in nonmetallic minerals (except fuels) mining industries
Nonmetallic minerals mining, total.....	76,694	25,515	13,244	12,271
Stone, sand and gravel...	46,585	14,850	3,118	11,732
Clay and related minerals	5,075	8,827	3,437	408
Chemical and fertilizer minerals.....	19,838		4,982	
Miscellaneous nonmetallic minerals.....	5,196		1,707	

MISCELLANEOUS NONMETALLIC MINERALS, EXCEPT FUELS

Industry 1492—Gypsum. This industry represents establishments primarily engaged in mining, quarrying, milling, or otherwise preparing gypsum. Calcining activities are excluded. However, if a gypsum mine is part of an establishment producing gypsum products, the entire establishment is classified in the manufacturing industry 3275, Gypsum Products. In 1963, about two-thirds of all gypsum produced was mined at such establishments. Selected statistics for such mines are included in tables 1, 2, and 6A of this report.

Industry 1493—Mica. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing mica. Establishments engaged in grinding mica which do not include a mine are classified in the manufacturing industry 3295, Minerals, Ground or Treated. About 30 percent of all ground mica produced in 1963 was prepared at such establishments.

Industry 1494—Native Asphalt and Bitumens. This industry represents establishments primarily engaged in mining, milling, or otherwise preparing native asphalt and bitumens, including gilsonite, wurtzilite, grahamite, and ozokerite. The mining of bituminous limestone and bituminous sandstone is also included.

Industry 1495—Pumice and Pumicite. This industry represents establishments primarily engaged in mining, quarrying, milling, or otherwise preparing pumice and pumicite (volcanic ash).

Industry 1496—Talc, Soapstone, and Pyrophyllite. This industry represents establishments primarily engaged in mining, quarrying, milling, or otherwise preparing talc,

soapstone, or pyrophyllite. Dimension soapstone is included in this industry. Establishments engaged in grinding talc, soapstone, or pyrophyllite which do not include a mine are classified in the manufacturing industry 3295, Minerals, Ground or Treated. About 24 percent of all ground talc, soapstone, and pyrophyllite produced in 1963 was prepared at such establishments.

Industry 1497—Natural Abrasives, Except Sand. This industry represents establishments primarily engaged in mining, quarrying, milling, or otherwise preparing natural abrasives, such as corundum, industrial diamonds, emery, garnet, and tripoli. This industry includes the shaping of natural abrasive stones at the quarry. Establishments primarily engaged in the production of blast, grinding, or polishing sand are classified in industry 1441, Sand and Gravel, and those primarily engaged in the production of diatomite in industry 1499, Miscellaneous Nonmetallic Minerals, N.E.C.

Industry 1498—Peat. This industry represents establishments primarily engaged in mining peat, and in the preparation of peat.

Industry 1499—Miscellaneous Nonmetallic Minerals, Not Elsewhere Classified. This industry represents establishments primarily engaged in mining, quarrying, milling, or otherwise preparing miscellaneous nonmetallic minerals, not elsewhere classified, such as asbestos, diatomite, natural gem stones, graphite, greensand, perlite, Iceland spar (optical grade calcite), and vermiculite. Separate subindustry figures have been tabulated for 1963 for "Asbestos," "Diatomite," "Perlite," and "Vermiculite, greensand, and other minerals."

The total value of shipments of the Miscellaneous Nonmetallic Minerals (Except Fuels) industries in 1963 was \$102.4 million, of which primary products of these industries amounted to \$100.6 million and secondary products, products purchased and resold without further processing, and receipts for services amounted to only \$1.2 million. Of the total value of shipments for this group, the Gypsum Industry accounted for about \$10 million; the Mica Industry, \$6 million; the Native Asphalt and Bitumens Industry, \$9 million; the Pumice and Pumicite Industry, \$5 million; the Talc, Soapstone, and Pyrophyllite Industry, \$18 million; the Natural Abrasives Industry, \$5 million; the Peat Industry, \$7 million; and the Miscellaneous Nonmetallic Minerals, N.E.C., Industry, \$43 million. These figures represent gross value of shipments and some of them contain duplication due to the inclusion of shipments of crude minerals to other establishments in the same industry for preparation. However, the cost of crude minerals received for preparation in all of these industries was only \$0.6 million.

#### COMPARABILITY WITH BUREAU OF MINES STATISTICS

The Bureau of the Census statistics on primary products of the Miscellaneous Nonmetallic Minerals (Except Fuels) Industries are, in general, comparable with product statistics for the same commodities published by the Bureau of Mines. The differences which occur result primarily from differences in data collection methods, coverage, and objectives sought. The most nearly comparable statistics from the two bureaus are shown in the table below. Major reasons for the differences in the product statistics are as follows:

1. The Bureau of the Census collects information on production and shipments and calculates net shipments whereas the Bureau of Mines generally obtains figures on products sold or used. Differences between shipments and sold and used, for example, account for significant differences between Census and Mines figures shown for gypsum and scrap mica.

2. The Bureau of the Census excludes small establishments whose value of products and reported costs were below \$500. The Bureau of Mines includes all reports obtained regardless of size. However, the contribution to product of such small operations is usually very small.

3. Differences exist in coverage in certain areas for both collecting agencies.

4. Census figures are sometimes reported at a different level of preparation than Bureau of Mines figures. In general, Census uses a uniform approach to crude and prepared material, requesting for crude the total material actually loaded at the mine site, and under prepared material, the product of all preparation methods such as milling, washing, grinding, and sizing. This explains, in part, the differences between prepared figures for the two agencies for talc, soapstone, and pyrophyllite.

5. Census includes the value of containers if the mineral product is sold with containers from the mine or preparation plant. This may explain some of the differences in total value for peat.

## 1963 BUREAU OF THE CENSUS AND BUREAU OF MINES STATISTICS COMPARED

Product	Unit of measure	Bureau of the Census statistics			Bureau of Mines statistics	
		Production (quantity)	Shipments including interplant transfers		Production	
			Quantity	Value (\$1,000)	Quantity	Value (\$1,000)
Gypsum:						
Crude.....	1,000 short tons.....	<sup>1</sup> 10,176	339	1,094	10,388	38,138
Prepared (crushed, ground, screened, or dried).....	...do.....	(NA)	4,736	19,757	(NA)	(NA)
Mica:						
Hand-cobbed and sheet mica.....	1,000 lbs..	108	108	16	<sup>2</sup> 103	<sup>2</sup> 13
Scrap (or flake) mica	1,000 short tons.....	113	42	1,320	<sup>2</sup> 109	<sup>2</sup> 2,776
Ground mica.....	...do.....	(NA)	124	7,549	<sup>2</sup> 117	<sup>2</sup> 6,805
Native asphalt and bitumens:						
Gilsonite.....	...do.....	(D)	(D)	8,799	1,633	8,383
Bituminous limestone and sandstone.....	...do.....	1,314	1,317			
Pumice and pumicite....	...do.....	2,308	2,294	5,460	<sup>2</sup> <sup>3</sup> 2,618	<sup>2</sup> <sup>3</sup> 6,578
Talc, soapstone, and pyrophyllite:						
Crude.....	...do.....	873	<sup>4</sup> 219	<sup>4</sup> 1,946	<sup>5</sup> 804	<sup>5</sup> 5,505
Prepared.....	...do.....	(NA)	795	18,694	<sup>5</sup> <sup>6</sup> 730	<sup>5</sup> <sup>6</sup> 18,110
Natural abrasives, except sand.....	...do.....	84	83	5,001	<sup>2</sup> 91	<sup>2</sup> 2,052
Peat.....	...do.....	566	549	7,374	<sup>6</sup> 579	<sup>6</sup> 5,423
Asbestos, crude and prepared.....	...do.....	68	64	5,490	<sup>6</sup> 66	<sup>6</sup> 5,425
Diatomite, prepared....	...do.....	<sup>7</sup> 554	<sup>7</sup> 554	<sup>7</sup> 27,952	<sup>8</sup> 482	<sup>8</sup> 24,149
Perlite.....	...do.....	385	<sup>9</sup> 343	<sup>9</sup> 4,652	<sup>2</sup> 325	<sup>2</sup> 2,727
Other nonmetallic minerals.....	...do.....	412	<sup>4</sup> 391	<sup>4</sup> 6,146	(NA)	<sup>10</sup> 23,364

(D) Withheld to avoid disclosure.

(NA) Not available.

<sup>1</sup>In addition to gypsum mined for shipment in crude or prepared form, includes 6,931 tons of gypsum valued at approximately \$24,009 thousand, produced and used in the same establishment in the manufacture of calcined gypsum products.

<sup>2</sup>Represents minerals sold or used by producers.

<sup>3</sup>Includes volcanic cinder.

<sup>4</sup>Represents net shipments, that is gross shipments less minerals received for preparation.

<sup>5</sup>Excludes dimension soapstone.

<sup>6</sup>Represents sales.

<sup>7</sup>Includes crude diatomite produced for shipment without preparation, amounting to less than one percent of the total.

<sup>8</sup>Represents average annual production, 1960-1962.

<sup>9</sup>Includes some expanded perlite produced in conjunction with mining.

<sup>10</sup>Represents gem stones, vermiculite, graphite, greensand, marl, steatolite, and other

# NONMETALLIC MINERALS SERVICES AND NONMETALLIC MINERALS, N.E.C.

Distribution of Employment by State: 1963



## Employment, including mining in manufactures: 1840-1963

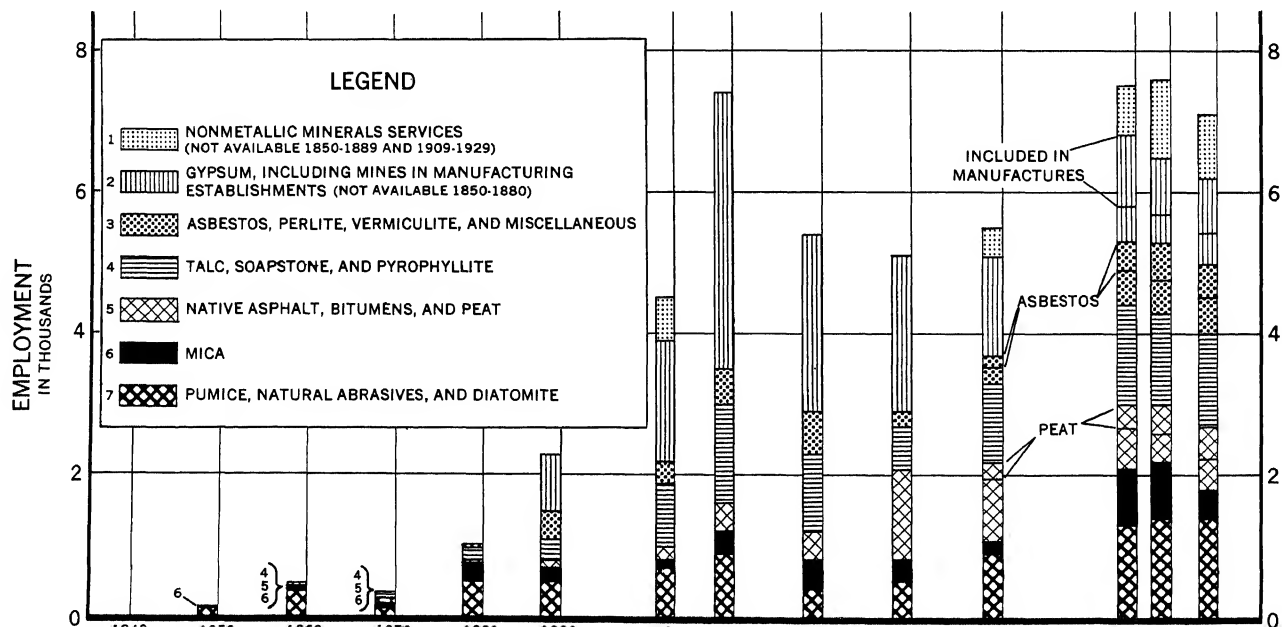


TABLE 1. General Statistics: 1963 and Earlier Years

Industry or subindustry and year	Operating companies  (number)	Establishments		All employees		Production, development, and exploration workers			Value added in mining  (\$1,000)	Cost of supplies, minerals received for preparation, fuels, purchased electric energy, and contract work  (\$1,000)	Cost of purchased machinery installed  (\$1,000)	Value of shipments and receipts  (\$1,000)	Value of net shipments and receipts  (\$1,000)	Quantity of primary products <sup>1</sup>  (1,000 short tons)	Capital expenditures  (\$1,000)	Horse-power rating of power equipment  (1,000)
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages								
		(number)	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)								
1481.—NONMETALLIC MINERALS SERVICES																
1963.....	118	119	11	871	4,581	806	1,575	4,209	9,326	4,290	1,064	13,246	13,244	(X)	1,434	69
1958.....	74	75	6	1,109	3,522	1,037	1,893	3,038	6,217	1,865	700	7,934	7,934	(X)	848	(NA)
1954.....	62	62	4	639	2,327	614	1,258	2,214	4,884	1,666	402	6,571	6,301	(X)	381	39
1939.....	65	65	(NA)	335	368	307	632	320	725	241	(NA)	966	966	(X)	53	18
1902 <sup>3</sup> .....	(NA)	(NA)	(NA)	587	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	228	(X)	(NA)	(NA)
<u>Subindustry</u>																
Stone, sand, and gravel services:																
1963.....	45	45	3	274	1,188	261	503	1,153	2,165	999	432	3,120	3,118	(X)	476	27
1958.....	15	15	1	97	491	81	175	347	1,034	485	208	1,573	1,573	(X)	154	(NA)
1954.....	18	18	(NA)	286	1,059	282	579	1,049	2,228	650	(D)	2,878	(NA)	(X)	(D)	8
1939.....	30	30	(NA)	144	152	133	283	143	278	80	(NA)	358	358	(X)	4	6
Clay and related minerals services:																
1963.....	57	57	1	256	990	229	415	900	2,643	868	269	3,437	3,437	(X)	343	22
1958.....	25	25	1	151	492	136	251	437	1,165	530	156	1,701	1,701	(X)	150	(NA)
1954.....	24	24	(NA)	137	470	129	268	425	1,181	453	142	1,649	(NA)	(X)	127	18
1939.....	12	12	(NA)	67	78	59	128	51	192	84	(NA)	276	276	(X)	31	6
Chemical and fertilizer minerals services:																
1963.....	9	9	5	230	1,684	217	444	1,551	3,082	2,055	342	4,982	4,982	(X)	497	15
1958.....	15	16	2	405	1,291	383	652	1,100	2,267	508	104	2,780	2,780	(X)	99	(NA)
1954.....	4	4	(NA)	55	188	55	100	188	376	169	(D)	545	(NA)	(X)	(D)	3
1939.....	11	11	(NA)	45	43	40	60	38	85	36	(NA)	121	121	(X)	15	3
Miscellaneous minerals, n.e.c. services:																
1963.....	8	8	2	111	719	99	213	605	1,436	368	21	1,707	1,707	(X)	118	5
1958.....	19	19	2	456	1,248	437	815	1,154	1,751	342	232	1,880	1,880	(X)	445	(NA)
1954.....	16	16	(NA)	161	610	148	311	552	1,099	394	124	1,499	(NA)	(X)	118	11
1939.....	12	12	(NA)	79	95	75	161	88	170	41	(NA)	211	211	(X)	3	3
149.—MISCELLANEOUS NONMETALLIC MINERALS AND SIMILAR MINES IN MANUFACTURES																
1963, total.....	4420	490	69	6,198	32,107	5,330	11,105	26,421	104,212	31,428	7,451	131,162	130,567	(X)	(NA)	(NA)
Miscellaneous non-metallic minerals.....	4413	453	53	5,477	28,474	4,609	9,663	22,788	78,325	28,599	7,451	102,446	101,851	(X)	11,929	312
Miscellaneous minerals in manufactures.....	9	37	16	721	3,633	721	1,442	3,633	25,887	2,829	(NA)	628,716	628,716	(X)	(NA)	(NA)
1958, total.....	4445	513	71	6,519	27,297	5,544	11,241	21,255	86,479	25,197	(NA)	108,187	107,898	(X)	(NA)	(NA)
Miscellaneous non-metallic minerals.....	438	481	55	5,654	23,514	4,679	9,511	17,472	62,684	21,868	5,896	81,063	80,774	(X)	9,385	(NA)
Miscellaneous minerals in manufactures.....	8	32	16	865	3,783	865	1,730	3,783	23,795	3,329	(NA)	627,124	627,124	(X)	(NA)	(NA)
1954, total.....	783	897	(NA)	6,816	24,393	5,959	12,128	19,944	70,121	20,311	(NA)	88,299	87,741	(X)	(NA)	(NA)
Mines and plants classified in mineral industries.....	779	870	52	5,787	20,388	4,930	10,070	15,939	47,831	17,371	5,808	63,069	62,511	(X)	7,941	250
Mines included in establishments classified in manufacturing industries.....	5	27	(NA)	1,029	4,005	1,029	2,058	4,005	22,290	2,940	(NA)	625,230	625,230	(X)	(NA)	(NA)
1939 <sup>7</sup> .....	4211	8256	(NA)	5,112	5,670	4,509	8,861	4,375	12,934	93,340	(NA)	(NA)	16,274	(X)	(NA)	79
1929 <sup>7</sup> .....	(NA)	171	(NA)	5,135	6,791	4,634	(NA)	5,421	12,772	93,104	379	(NA)	15,876	(X)	(NA)	58
1919 <sup>7</sup> .....	(NA)	214	(NA)	5,410	5,812	4,803	(NA)	4,652	8,346	3,960	(NA)	12,306	12,306	(X)	(NA)	33
1909 <sup>10</sup> .....	4373	373	(NA)	7,424	4,160	6,690	(NA)	3,278	7,055	2,385	(NA)	9,440	9,440	(X)	(NA)	37
1902 <sup>7</sup> .....	685	315	(NA)	3,930	2,156	113,402	(NA)	1,632	4,692	671	(NA)	(NA)	5,363	(X)	(NA)	14
1889 <sup>7</sup> .....	(NA)	(NA)	(NA)	2,276	812	(NA)	(NA)	(NA)	1,782	267	(NA)	(NA)	2,049	(X)	(NA)	(NA)
1492.—Gypsum Industry and Gypsum Mines in Manufactures																
1963, total.....	40	74	22	1,179	6,039	1,104	2,249	5,546	33,640	5,651	(NA)	38,876	38,876	(NA)	(NA)	(NA)
Gypsum industry.....	33	37	6	458	2,406	383	807	1,913	7,753	2,822	864	10,160	10,160	(X)	1,279	32
Gypsum mines in manufactures.....	9	37	16	721	3,633	721	1,442	3,633	25,887	2,829	(NA)	628,716	628,716	(X)	(NA)	(NA)
1958, total.....	36	64	20	1,271	5,588	1,219	2,506	5,264	29,753	4,661	(NA)	34,172	34,172	(X)	(NA)	(NA)
Gypsum industry.....	29	32	4	406	1,805	354	776	1,481	5,958	1,332	578	7,048	7,048	(X)	2,569	820
Gypsum mines in manufactures.....	8	32	16	865	3,783	865	1,730	3,783	23,795	3,329	(NA)	627,124	627,124	(X)	(NA)	(NA)
1954, total.....	38	64	(NA)	1,478	5,857	1,428	2,984	5,572	27,642	4,247	(NA)	31,861	(NA)	(X)	(NA)	(NA)
Gypsum industry.....	34	37	5	449	1,852	399	926	1,567	5,352	1,307	2,395	6,631	(NA)	(X)	2,423	28
Gypsum mines in manufactures.....	5	27	(NA)	1,029	4,005	1,029	2,058	4,005	22,290	2,940	(NA)	625,230	625,230	(X)	(NA)	(NA)

See footnotes at end of table.



TABLE 1. General Statistics: 1963 and Earlier Years—Continued

Industry or subindustry and year	Operating companies	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, minerals received for preparation, fuels, purchased electric energy, and contract work	Cost of purchased machinery installed	Value of shipments and receipts	Value of net shipments and receipts	Quantity of primary products <sup>1</sup>	Capital expenditures	Horse-power rating of power equipment
		Total	With 20 employees or more	Total	Payroll	Total	Man-hours	Wages								
(number)	(\$1,000)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 short tons)	(\$1,000)	(1,000)	
149.—MISCELLANEOUS NONMETALLIC MINERALS AND SIMILAR MINES IN MANUFACTURES—Continued																
1492.—Gypsum Industry and Gypsum Mines in Manufactures—Cont.																
1939.....	34	<sup>8</sup> 59	(NA)	1,424	1,857	1,327	2,466	1,640	3,756	<sup>9</sup> 813	(NA)	(NA)	4,569	3,302	(NA)	29
1929 <sup>12</sup> .....	(NA)	60	(NA)	2,212	2,935	2,078	(NA)	2,628	4,516	<sup>9</sup> 1,224	578	(NA)	5,740	5,152	(NA)	26
1919.....	(NA)	47	(NA)	2,473	3,033	2,191	(NA)	2,478	4,612	2,194	(NA)	6,806	6,806	2,420	(NA)	15
1909.....	82	82	(NA)	3,901	2,377	3,469	(NA)	1,825	4,235	1,578	(NA)	5,813	5,813	2,253	(NA)	18
1902.....	45	<sup>8</sup> 62	(NA)	1,721	1,059	<sup>11</sup> 1,472	(NA)	759	1,747	<sup>9</sup> 342	(NA)	(NA)	2,089	816	(NA)	7
1889.....	(NA)	<sup>8</sup> 24	(NA)	761	249	<sup>13</sup> 715	(NA)	(NA)	625	<sup>9</sup> 139	(NA)	(NA)	764	268	(NA)	2
1493.—Mica																
1963.....	31	34	6	398	1,582	357	733	1,299	3,925	1,991	504	5,560	(D)	<sup>14</sup> 103,024	860	25
1958.....	142	149	8	727	2,007	649	1,204	1,709	4,974	1,841	577	6,221	6,216	<sup>14</sup> 94,292	1,171	(NA)
1954 <sup>15</sup> .....	446	498	6	710	1,342	668	1,196	1,255	3,284	1,228	474	4,126	4,092	<sup>14</sup> 59,068	860	17
1939.....	22	<sup>8</sup> 21	(NA)	210	138	190	361	118	276	<sup>9</sup> 61	(NA)	(NA)	327	<sup>14</sup> 20,731	(NA)	2
1929 <sup>12</sup> .....	(NA)	24	(NA)	249	253	226	(NA)	195	415	<sup>9</sup> 101	6	(NA)	516	<sup>14</sup> 12,130	(NA)	2
1919 <sup>12</sup> .....	(NA)	65	(NA)	488	335	448	(NA)	288	469	138	(NA)	607	607	(NA)	(NA)	1
1909.....	77	77	(NA)	305	143	284	(NA)	125	177	30	(NA)	207	207	(NA)	(NA)	(Z)
1902.....	38	<sup>8</sup> 49	(NA)	119	57	<sup>11</sup> 98	(NA)	44	107	<sup>9</sup> 12	(NA)	(NA)	119	<sup>14</sup> 1,587	(NA)	(Z)
1889.....	(NA)	<sup>8</sup> 4	(NA)	185	42	<sup>13</sup> 170	(NA)	36	45	<sup>9</sup> 7	(NA)	52	52	<sup>14</sup> 221	(NA)	(NA)
1880.....	(NA)	<sup>8</sup> 22	(NA)	272	66	(NA)	(NA)	(NA)	122	6	(NA)	128	128	<sup>14</sup> 41	(NA)	(NA)
1870 <sup>16</sup> .....	(NA)	3	(NA)	27	6	(NA)	(NA)	(NA)	8	1	(NA)	9	9	(NA)	(NA)	(NA)
1494.—Native Asphalt and Bitumens																
1963.....	11	13	4	422	2,241	357	728	1,723	6,333	2,630	627	8,509	(D)	(D)	1,081	34
1958.....	8	10	5	464	2,265	367	732	1,398	5,954	2,293	517	8,041	8,041	1,615	723	(NA)
1954.....	9	12	7	551	2,147	451	987	1,443	4,857	1,643	476	6,424	6,424	1,417	552	31
1939.....	23	<sup>8</sup> 23	(NA)	853	892	730	1,330	608	2,554	<sup>9</sup> 414	(NA)	(NA)	2,968	495	(NA)	13
1929.....	(NA)	21	(NA)	1,306	1,841	1,123	(NA)	1,255	4,345	<sup>9</sup> 779	182	(NA)	5,124	819	(NA)	1.3
1919.....	(NA)	9	(NA)	387	431	324	(NA)	295	343	407	(NA)	750	750	(NA)	(NA)	1
1909 <sup>12</sup> .....	12	12	(NA)	234	173	208	(NA)	129	370	96	(NA)	466	466	(NA)	(NA)	1
1902.....	24	<sup>8</sup> 24	(NA)	208	128	<sup>11</sup> 156	(NA)	80	205	<sup>9</sup> 32	(NA)	(NA)	237	66	(NA)	1
1889 <sup>17</sup> .....	(NA)	(NA)	(NA)	136	67	<sup>13</sup> 126	(NA)	60	152	22	(NA)	(NA)	174	52	(NA)	(NA)
1495.—Pumice and Pumicite																
1963.....	83	85	1	247	1,056	222	428	981	4,198	1,335	507	5,358	5,338	<sup>12</sup> 2,308	682	26
1958.....	69	70	2	354	1,218	303	471	1,002	4,387	1,408	312	5,482	5,482	2,093	625	(NA)
1954.....	73	75	1	267	962	223	440	748	2,741	769	298	3,393	(NA)	1,818	415	26
1939 <sup>19</sup> .....	15	17	(NA)	127	126	122	197	119	301	86	(NA)	(NA)	387	87	(NA)	2
1909 <sup>19</sup> .....	3	3	(NA)	17	5	15	(NA)	5	29	1	(NA)	30	30	(NA)	(NA)	-
1496.—Talc, Soapstone, Pyrophyllite																
1963.....	43	65	9	1,276	6,627	1,054	2,229	5,390	13,746	4,468	468	17,534	17,272	<sup>12</sup> 873	1,148	48
1958.....	43	64	12	1,294	5,320	1,123	2,289	4,157	11,755	3,542	509	14,908	(D)	726	898	(NA)
1954.....	54	68	13	1,471	4,940	1,297	2,778	4,141	9,486	3,044	486	11,819	11,563	610	1,197	36
1939.....	29	<sup>8</sup> 38	(NA)	1,137	1,189	970	2,068	807	2,441	<sup>9</sup> 828	(NA)	(NA)	3,269	254	(NA)	12
1929.....	(NA)	25	(NA)	632	832	550	(NA)	615	2,012	<sup>9</sup> 676	35	(NA)	2,688	243	(NA)	11
1919.....	(NA)	28	(NA)	1,061	1,050	958	(NA)	835	1,749	553	(NA)	2,302	2,302	(NA)	(NA)	7
1909.....	39	39	(NA)	1,356	607	1,256	(NA)	504	909	266	(NA)	1,175	1,175	(NA)	(NA)	9
1902.....	20	<sup>8</sup> 20	(NA)	846	343	<sup>11</sup> 771	(NA)	279	1,012	<sup>9</sup> 126	(NA)	(NA)	1,138	98	(NA)	4
1889.....	(NA)	(NA)	(NA)	280	116	<sup>13</sup> 260	(NA)	101	437	39	(NA)	(NA)	476	36	(NA)	(NA)
1880.....	(NA)	<sup>8</sup> 14	(NA)	178	58	(NA)	(NA)	(NA)	103	18	(NA)	(NA)	121	13	(NA)	(NA)
1870.....	(NA)	9	(NA)	74	38	(NA)	(NA)	(NA)	91	98	(NA)	(NA)	189	(NA)	(NA)	(NA)
1860.....	(NA)	6	(NA)	27	11	(NA)	(NA)	(NA)	18	10	(NA)	(NA)	28	(NA)	(NA)	(NA)
1497.—Natural Abrasives, Except Sand																
1963.....	23	23	5	294	1,583	216	466	1,048	4,125	1,296	79	5,002	5,001	84	498	17
1958.....	20	20	4	229	1,007	204	408	801	2,648	786	88	3,373	3,373	<sup>16</sup> 6	149	(NA)
1954.....	22	22	3	218	88 <sup>5</sup>	197	403	698	2,874	869	79	3,490	3,490	74	332	11
1939.....	27	<sup>8</sup> 36	(NA)	443	479	383	798	346	1,115	<sup>9</sup> 220	(NA)	(NA)	1,335	44	(NA)	5
1929 <sup>19</sup> .....	(NA)	30	(NA)	525	659	462	(NA)	491	1,165	<sup>9</sup> 246	67	(NA)	1,411	90	(NA)	4
1919 <sup>19</sup> .....	(NA)	34	(NA)	354	378	317	(NA)	322	488	234	(NA)	722	722	(NA)	(NA)	2
1909 <sup>20</sup> .....	63	<sup>8</sup> 63	(NA)	846	346	807	(NA)	303	646	194	(NA)	840	840	(NA)	(NA)	4
1902 <sup>20</sup> .....	65	<sup>8</sup> 71	(NA)	642	327	<sup>11</sup> 575	(NA)	283	1,044	<sup>9</sup> 78	(NA)	(NA)	1,122	(NA)	(NA)	2
1889 <sup>21</sup> .....	(NA)	(NA)	(NA)	450	141	442	(NA)	136	247	49	(NA)	296	296	(NA)	(NA)	(NA)
1880 <sup>22</sup> .....	(NA)	<sup>8</sup> 45	(NA)	490	184	490	(NA)	184	340	264	(NA)	604	604	(NA)	(NA)	(NA)
1870 <sup>23</sup> .....	(NA)	35	(NA)	152	55	(NA)	(NA)	(NA)	139	97	(NA)	236	236	(NA)	(NA)	(Z)
1860 <sup>24</sup> .....	49	(NA)	(NA)	370	126	(NA)	(NA)	(NA)	278	147	(NA)	425	425	(NA)	(NA)	(NA)
1850 <sup>25</sup> .....	35	(NA)	(NA)	152	55	(NA)	(NA)	(NA)	139	97	(NA)	236	236	(NA)	(NA)	(NA)

See footnotes at end of table.

TABLE 1. General Statistics: 1963 and Earlier Years—Continued

Industry or subindustry and year	Operating companies  (number)	Establishments		All employees		Production, development, and exploration workers			Value added in mining  (\$1,000)	Cost of supplies, minerals received for preparation, fuels, pur- chased elec- tric energy, and contract work  (\$1,000)	Cost of purchased machinery installed  (\$1,000)	Value of shipments and receipts  (\$1,000)	Value of net shipments and receipts  (\$1,000)	Quantity of primary products <sup>1</sup>  (1,000 short tons)	Capital expen- ditures  (\$1,000)	Horse- power rating of power equipment  (1,000)
		Total  (number)	With 20 employ- ees or more  (number)	Total  (number)	Payroll  (\$1,000)	Total  (number)	Man- hours  (1,000)	Wages  (\$1,000)								
149.—MISCELLANEOUS NONMETALLIC MINERALS AND SIMILAR MINES IN MANUFACTURES—Continued																
1498.—Peat																
1963.....	108	109	4	504	1,778	442	948	1,473	5,626	1,866	738	7,360	7,360	<sup>1</sup> 566	870	26
1958.....	80	81	3	389	1,282	335	613	974	3,640	1,104	446	4,379	4,370	<sup>1</sup> 366	811	(NA)
1954.....	86	88	3	353	940	321	637	829	1,800	572	159	2,326	2,326	249	205	24
1939 <sup>12</sup> .....	23	<sup>8</sup> 25	(NA)	184	144	157	246	101	338	<sup>9</sup> 40	(NA)	(NA)	378	56	(NA)	3
1909 <sup>12</sup> .....	10	10	(NA)	126	60	112	(NA)	40	85	24	(NA)	109	109	(NA)	(NA)	1
1870.....	(NA)	4	(NA)	39	6	(NA)	(NA)	(NA)	7	1	(NA)	(NA)	8	(NA)	(NA)	(Z)
1499.—Nonmetallic Min- erals, N.E.C.																
1963.....	81	87	18	1,878	11,201	1,578	3,324	8,961	32,619	12,191	3,664	42,963	42,911	(X)	5,511	104
1958.....	47	55	17	1,791	8,610	1,344	3,018	5,950	23,368	9,562	2,869	31,611	(D)	(X)	4,188	(NA)
1954.....	63	70	14	1,768	7,320	1,374	2,703	5,258	17,437	7,939	1,441	24,860	24,595	(X)	1,957	76
1939.....	<sup>4</sup> 38	<sup>8</sup> 37	(NA)	734	845	630	1,395	636	2,153	<sup>9</sup> 888	(NA)	(NA)	3,041	(X)	(NA)	13
Subindustry																
Asbestos:																
1963.....	11	11	4	457	2,560	395	807	2,163	4,445	2,587	1,602	5,521	(D)	68	3,113	25
1958.....	14	14	4	478	1,608	423	801	1,287	3,774	1,450	182	5,061	(D)	44	345	(NA)
1954.....	17	17	(NA)	435	1,402	394	754	1,164	3,899	1,093	248	4,877	4,877	49	363	17
1939.....	9	<sup>8</sup> 9	(NA)	169	169	160	344	151	341	<sup>9</sup> 151	(NA)	492	492	15	(NA)	4
1929 <sup>12</sup> .....	(NA)	11	(NA)	211	271	195	(NA)	237	319	<sup>9</sup> 78	89	(NA)	397	3	(NA)	2
1919.....	(NA)	10	(NA)	160	121	146	(NA)	92	198	52	(NA)	250	250	(NA)	(NA)	(Z)
1909.....	10	10	(NA)	80	66	65	(NA)	46	40	25	(NA)	65	65	(NA)	(NA)	(Z)
1902.....	4	<sup>8</sup> 4	(NA)	30	11	<sup>11</sup> 23	(NA)	8	38	<sup>9</sup> 8	(NA)	(NA)	46	3	(NA)	(Z)
1889.....	(NA)	(NA)	(NA)	12	2	<sup>13</sup> 9	(NA)	(NA)	1	1	(NA)	(NA)	2	(Z)	(NA)	(NA)
1880.....	(NA)	7	(NA)	17	1	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)	4	(Z)	(NA)	(NA)
Diatomite:																
1963.....	14	16	8	849	5,951	681	1,492	4,669	21,776	6,392	1,238	27,923	27,923	554	1,483	39
1958.....	9	13	7	857	4,803	619	1,497	3,303	14,723	6,598	2,019	20,212	20,212	458	3,128	(NA)
1954.....	11	14	(NA)	864	3,880	635	1,206	2,718	9,233	5,590	1,036	14,784	(NA)	437	1,075	38
1939 <sup>19</sup> .....	14	<sup>8</sup> 14	(NA)	361	476	299	751	338	1,393	<sup>9</sup> 625	(NA)	2,018	2,018	98	(NA)	7
1909 <sup>12</sup> .....	14	14	(NA)	67	33	59	(NA)	28	61	15	(NA)	76	76	(NA)	(NA)	(Z)
1902 <sup>19</sup> .....	10	<sup>8</sup> 11	(NA)	43	18	<sup>11</sup> 35	(NA)	14	54	2	(NA)	(NA)	56	6	(NA)	(Z)
1889 <sup>26</sup> .....	(NA)	(NA)	(NA)	52	9	<sup>13</sup> 29	(NA)	8	21	2	(NA)	(NA)	23	3	(NA)	(NA)
Perlite:																
1963.....	24	24	3	219	1,057	181	366	708	2,703	1,799	215	4,545	(D)	<sup>1</sup> 343	172	15
1958.....	12	14	3	176	922	120	320	563	1,772	795	542	2,604	2,604	283	505	(NA)
1954.....	18	19	(NA)	123	486	101	241	369	1,621	665	69	2,259	2,259	277	96	8
Vermiculite, greensand, and other minerals:																
1963.....	35	36	3	353	1,633	321	659	1,421	3,695	1,413	609	4,974	(D)	(X)	743	25
1958.....	12	14	3	280	1,277	182	400	797	3,099	719	126	3,734	3,734	(X)	210	(NA)
1954.....	20	20	(NA)	346	1,552	244	502	1,007	2,684	591	88	2,940	(NA)	(X)	423	14
1939.....	15	<sup>8</sup> 14	(NA)	204	200	171	300	147	419	<sup>9</sup> 112	(NA)	531	531	(X)	(NA)	2
1919.....	(NA)	21	(NA)	487	464	419	(NA)	342	487	382	(NA)	869	869	(X)	(NA)	6
1909 <sup>9</sup> .....	54	54	(NA)	486	351	415	(NA)	273	504	155	(NA)	659	659	(X)	(NA)	3
1902.....	<sup>27</sup> 479	<sup>8</sup> 74	(NA)	321	213	<sup>11</sup> 272	(NA)	165	485	<sup>9</sup> 71	(NA)	(NA)	556	(X)	(NA)	1
1889.....	(NA)	(NA)	(NA)	400	186	(NA)	(NA)	(NA)	254	8	(NA)	(NA)	262	(X)	(NA)	(NA)
1880.....	(NA)	4	(NA)	95	30	(NA)	(NA)	(NA)	47	3	(NA)	(NA)	50	(X)	(NA)	(Z)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing data for individual companies. (NA) Not available. (X) Not applicable.

<sup>2</sup> Less than one-half of the unit of measure specified. n.e.c. Not elsewhere classified.<sup>1</sup> Represents the product indicated by the name of the industry. For gypsum and talc, soapstone, and pyrophyllite operations, represents production of crude material. Also, represents production for native asphalt and bitumens; pumice and pumicite; natural abrasives, except sand; peat; asbestos; and diatomite. For mica and perlite represents shipments for 1963, 1958, and 1954, for earlier years represents production. For 1963 for pumice and pumicite; talc, soapstone, and pyrophyllite; peat; and perlite, and for 1958 for natural abrasives, except sand, and peat includes production as a secondary product in other industries amounting to less than 5 percent of the product total.<sup>2</sup> Excludes the cost of subcontract work and products purchased for resale. For 1954, the cost of subcontract work was \$213 thousand and the cost of products purchased for resale \$133 thousand.<sup>3</sup> Represents number of employees engaged in contract work and payments for contract work as reported by companies operating nonmetallic minerals mines and quarries.<sup>4</sup> Represents the sum of figures shown for separate industries or subindustries and probably includes some duplication due to the same company operating in more than one industry or subindustry.<sup>5</sup> Number of production, development, and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations, hence, the same figures are shown for production, development, and exploration workers and for all employees.<sup>6</sup> Includes the estimated value of gypsum produced and used in the same establishment in the manufacture of calcined gypsum products.<sup>7</sup> For 1939, figures other than number of companies and number of mines include data for 2 lithium mines which are classified in the Chemical-Fertilizer-Mining, N.E.C. Industry. For 1929, 1919, 1902, and 1889 excludes data for the Peat Industry. See also footnotes 12.<sup>8</sup> Represents number of mines.<sup>9</sup> Excludes the cost of minerals received for preparation.<sup>10</sup> The figures for number of operating companies and number of establishments include data for 9 nonproducing establishments for which other data are combined with figures for metal mining. See also footnote 12.<sup>11</sup> Figures for average employment were reduced to a 300-day basis for establishments which operated for a shorter period.<sup>12</sup> Excludes nonproducing establishments for which separate figures are not available as follows: 1939, Peat, 1 mine and 1 preparation plant; 1929, Gypsum 1, Mica 1, and Asbestos 1; 1919, Mica 1; and 1909, Native asphalt and bitumens 2; Peat 2; Diatomite 1, and Lithographic stone 2.<sup>13</sup> Represents the average number employed during the time the mines were active.

Footnotes continued on next page.

TABLE 1. General Statistics: 1963 and Earlier Years—Continued

Footnotes for Table 1--14F--Continued.

- <sup>14</sup>Represents short tons.
- <sup>15</sup>Excludes data for one establishment with no employees in Alaska.
- <sup>16</sup>Only one establishment was reported in the Mica Industry for 1860 and 2 establishments for 1850.
- <sup>17</sup>Only 2 establishments were reported in the Native Asphalt and Bitumens Industry in 1880, and one establishment in 1870 and 1860.
- <sup>18</sup>Excludes data for 2 establishments with less than 5 employees in Hawaii.
- <sup>19</sup>For 1929 and 1919, figures for the Pumice and Pumicite Industry are included with those for the Natural Abrasives, Except Sand, Industry. For 1929, figures for the Diatomite subindustry are included with those for the Natural Abrasives, Except Sand, Industry. For 1902, figures for the Pumice and Pumicite Industry and for tripoli (classified in the Natural Abrasives, Except Sand, Industry) were included with those for the Diatomite subindustry.
- <sup>20</sup>For 1909, represents establishments primarily producing grindstones; buhrstones and millstones; oilstones, scythestones, and whetstones; corundum and emery; garnet; and tripoli. For 1902, represents establishments primarily producing grindstones and pulpstones; buhrstones and millstones; oilstones, whetstones, and scythestones; corundum and emery; garnet; and crystalline quartz. Excludes establishments primarily producing tripoli (these are included with the figures for the Diatomite subindustry); in 1909, the value of production of tripoli establishments represented 6 percent of the total value of production for the Natural Abrasives, Except Sand, Industry. For 1909, excludes data for 2 nonproducing establishments.
- <sup>21</sup>Represents establishments primarily producing corundum, grindstones, millstones, and whetstones; for 1902, the value of shipments for such products amounted to 91 percent of the total shown for the Natural Abrasives Industry in that year.
- <sup>22</sup>Represents establishments primarily producing corundum, garnet, grindstones, millstones, oilstones, scythestones, shoemakers' stones, and whetstones.
- <sup>23</sup>Represents establishments primarily producing burr millstones, grindstones, and millstones only.
- <sup>24</sup>Represents establishments primarily producing grindstones, millstones, oilstones, scythestones, whetstones, corundum, and emery.
- <sup>25</sup>Represents establishments primarily producing grindstones, buhrstones, and millstones only. Such establishments accounted for about 80 percent of the total value of products shown for this industry for 1860.
- <sup>26</sup>Only 2 establishments were reported in the Diatomite subindustry for 1880.
- <sup>27</sup>Includes a count of persons who found precious stones "by accident, in prospecting for, operating, or developing mines of other minerals; or in the working of gravels containing gold, monazite, etc."

**TABLE 2. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958**

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of primary products <sup>2</sup> (1,000 short tons)	Capital expendi- tures (\$1,000)	All employees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(number)	(\$1,000)	
1481.—NONMETALLIC MINERALS SERVICES.....	3119	311	871	4,581	806	1,575	4,209	9,326	5,354	13,246	(X)	1,434	1,109	6,21
<u>Geographic Area</u> <sup>3</sup>														
Northeast.....	13	-	24	98	24	47	98	316	250	518	(X)	48	38	37
East North Central.....	37	-	76	295	56	107	255	657	380	875	(X)	162	71	63
Ohio.....	21	-	52	186	34	71	163	461	283	596	(X)	148	(NA)	(NA)
West North Central.....	39	-	122	405	120	182	397	1,307	678	1,650	(X)	335	49	61
Missouri.....	30	-	83	225	81	121	219	833	329	1,017	(X)	145	(NA)	(NA)
South Atlantic.....	19	1	129	590	117	241	543	997	540	1,468	(X)	69	362	1,05
Florida.....	7	1	63	236	56	109	208	437	177	599	(X)	15	(NA)	(NA)
East South Central.....	12	2	110	476	95	203	354	1,026	886	1,712	(X)	200	73	45
Mountain.....	22	4	242	1,916	236	486	1,860	3,531	1,994	4,963	(X)	562	(NA)	(NA)
New Mexico.....	5	2	94	844	91	187	818	1,233	1,096	2,088	(X)	241	(NA)	(NA)
Pacific.....	13	2	134	716	125	253	617	1,301	575	1,828	(X)	48	(NA)	(NA)
California.....	9	1	49	296	40	86	197	706	267	965	(X)	8	(NA)	(NA)
<u>Services by Principal     Industry Served</u>														
Stone, and sand and gravel, total.....	45	3	274	1,188	261	503	1,153	2,165	1,431	3,120	(X)	476	97	1,03
Stone.....	30	2	192	815	182	353	791	1,362	885	2,030	(X)	217	(NA)	(NA)
Sand and gravel.....	15	1	82	373	79	150	362	803	546	1,090	(X)	259	(NA)	(NA)
Clay and related minerals.....	57	1	256	990	229	415	900	2,643	1,137	3,437	(X)	343	151	1,16
Chemical and fertilizer minerals, total	9	5	230	1,684	217	444	1,551	3,082	2,397	4,982	(X)	497	405	2,26
Phosphate rock.....	5	2	116	721	109	221	623	1,470	2,190	2,190	(X)	497	94	1,05
Fluorspar and potash.....	4	3	114	963	108	223	928	1,612	2,397	2,792	(X)	497	311	1,21
Miscellaneous nonmetallic minerals.....	8	2	111	719	99	213	605	1,436	389	1,707	(X)	118	456	1,75
1492.—GYPSUM INDUSTRY AND GYPSUM MINES IN MANUFACTURES, TOTAL.....	74	22	1,179	6,039	1,104	2,249	5,546	33,640	6,515	38,876	10,176	(NA)	1,271	29,75
Mines and plants classified in the Gypsum industry.....	37	6	458	2,406	383	807	1,913	7,753	3,686	10,160	3,246	1,279	406	5,95
Mines included in establishments classified in manufacturing.....	37	16	4721	43,633	4721	1,442	3,633	25,887	52,829	628,716	6,930	(NA)	4865	23,79
<u>Geographic Area</u>														
Middle Atlantic (New York).....	5	3	149	907	145	286	879	1,862	52,063	2,623	615	7433	242	2,85
East North Central.....	9	5	261	1,405	244	477	1,270	8,319	9,188	2,348	2,348	7433	421	12,53
West North Central (all mines in manu- factures).....	7	5	4132	4624	4132	264	624	6,373	5766	67,139	1,639	(NA)	363	7,22
South.....	18	5	345	1,446	322	657	1,326	7,179	1,824	8,447	2,064	(NA)	245	7,12
Gypsum industry.....	10	2	127	503	104	221	383	1,140	1,338	1,922	402	556	135	2,27
Gypsum mines in manufactures.....	8	3	4218	4943	4218	436	943	6,039	5486	66,525	1,662	(NA)	67	87
Oklahoma.....	7	1	66	302	58	115	245	1,707	5807	1,937	557	7382	66	1,56
Texas.....	7	1	86	387	82	163	373	3,800	3,995	3,995	1,004	7382	86	4,32
West.....	35	4	292	1,657	261	565	1,447	9,907	1,862	11,479	3,510	(NA)	245	7,12
Gypsum industry.....	22	2	166	976	135	313	766	2,930	1,308	3,948	1,603	290	135	2,27
Mountain.....	13	1	85	540	69	152	430	1,127	873	1,857	582	143	67	87
Pacific.....	9	1	81	436	66	161	336	1,803	435	2,091	1,021	147	68	1,40
Gypsum mines in manufactures.....	13	2	4126	4681	4126	252	681	6,977	5554	67,531	1,907	(NA)	5110	4,86
New Mexico.....	3	-	12	70	10	21	54	470	352	812	220	10	(NA)	(NA)
Nevada.....	5	2	74	534	71	153	505	2,690	603	3,244	854	49	(NA)	(NA)
<u>Type of Operation</u>														
Mines and plants classified in the gypsum industry:														
Producing open-pit mines with preparation plants.....	21	5	302	1,589	246	540	1,241	5,010	2,665	6,768	2,179	907	248	4,3
With crushing, grinding, pulverizing, or shredding only.....	10	2	124	694	97	212	511	29,923	884	3,558	1,296	249	(NA)	(NA)
Other operations.....	16	1	156	817	137	267	672	2,743	1,021	3,392	1,067	372	158	1,64
Mines included in establishments classified in manufacturing:														
Open-pit mines.....	24	7	4318	41,591	4318	637	1,591	16,884	51,404	618,288	2,712	(NA)	4429	17,2
Underground mines.....	13	9	4403	42,042	4403	805	2,042	9,003	51,425	610,428	4,218	(NA)	4436	6,5

See footnotes at end of table.

**TABLE 2. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued**

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of primary products <sup>2</sup> (1,000 short tons)	Capital expenditures	All employees	Value added in mining
	Total (number)	With 20 employees or more (number)	Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)							
	(number)	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(1,000 short tons)	(\$1,000)	(number)	(\$1,000)
1493.—MICA.....	34	6	398	1,582	357	733	1,299	3,925	2,495	5,560	103	860	727	4,974
<u>Geographic Area</u>														
South.....	21	5	335	1,353	297	623	1,090	3,435	2,127	4,842	86	720	524	3,465
North Carolina.....	15	4	239	989	212	471	825	2,063	1,589	3,190	51	462	391	2,714
<u>Type of Operation</u>														
Producing establishments, total.....	30	6	379	1,493	338	693	1,210	3,916	2,462	5,560	103	818	715	4,986
Open-pit mines only.....	12	-	42	86	42	63	86	576	270	779	16	67	135	1,431
Open-pit mines with preparation plants.....	18	6	337	1,407	296	630	1,124	3,340	2,192	4,781	87	751	296	1,877
1494.—NATIVE ASPHALT AND BITUMENS	13	4	422	2,241	357	728	1,723	6,333	3,257	8,509	(D)	1,081	464	5,594
1495.—PUMICE AND PUMICITE.....	85	1	247	1,056	222	428	981	4,198	1,842	5,358	<sup>2</sup> 2,308	682	354	4,387
<u>Geographic Area</u>														
Mountain.....	35	-	105	458	96	179	435	2,011	921	2,641	1,305	291	114	1,995
New Mexico.....	11	-	37	203	35	65	197	634	451	875	306	210	60	813
Arizona.....	3	-	37	166	34	67	157	1,179	122	1,261	718	40	(NA)	(NA)
Pacific.....	45	1	125	566	114	226	516	2,096	887	2,611	<sup>2</sup> 981	372	196	2,089
Oregon.....	7	-	30	156	27	58	139	429	214	573	362	70	(NA)	(NA)
California.....	24	1	78	365	70	137	332	1,246	509	1,527	286	228	135	1,493
<u>Type of Operation</u>														
Producing open-pit mines with preparation plants.....	51	1	199	868	174	341	793	2,813	1,467	3,692	1,165	588	217	2,375
1496.—TALC, SOAPSTONE, AND PYROPHYLLITE.....	65	9	1,276	6,627	1,054	2,229	5,390	13,746	4,936	17,534	<sup>2</sup> 873	1,148	1,294	11,755
<u>Geographic Area</u>														
Northeast.....	8	4	438	2,953	360	832	2,594	6,300	2,201	7,992	380	509	436	5,738
South Atlantic and East South Central.....	13	5	609	2,166	524	1,070	1,885	4,343	1,100	5,218	186	225	(NA)	(NA)
North Carolina.....	6	3	172	717	142	290	547	1,470	355	1,804	107	21	212	1,778
East South Central.....	6	-	46	239	33	66	160	588	188	722	92	54	(NA)	(NA)
Mountain.....	10	-	42	185	39	80	177	443	265	613	69	95	129	1,410
Pacific.....	28	-	141	1,084	98	181	574	2,072	1,182	2,989	<sup>2</sup> 146	265		
<u>Type of Operation</u>														
Producing establishments, total.....	61	9	<sup>8</sup> 1,274	<sup>8</sup> 6,621	1,052	2,225	5,384	13,740	4,926	17,534	873	1,132	1,293	11,772
Mines only:														
Open-pit.....	20	-	57	233	51	104	217	706	178	780	148	104	32	455
Underground and combination open-pit and underground.....	17	-	76	500	64	121	403	1,202	299	1,329	95	172	65	799
Mines with preparation plants:														
Open-pit:														
With crushing only.....	10	2	432	1,564	356	704	1,346	3,331	1,386	4,569	<sup>2</sup> 143	148	474	3,064
With two or more methods.....	5	-	57	246	55	112	234	641	495	958	33	178		
Underground.....	6	4	298	1,818	269	611	1,598	5,138	1,584	6,379	269	343	507	6,322
Combination open-pit and underground.....	3	3	325	1,865	257	573	1,586	2,722	984	3,519	185	187	215	1,132
1497.—NATURAL ABRASIVES, EXCEPT SAND.....	23	5	294	1,583	216	466	1,048	4,125	1,375	5,002	84	498	229	2,648
<u>Geographic Area</u>														
Middle Atlantic and North Central.....	13	5	280	1,504	204	443	982	3,826	1,251	4,631	78	446	213	2,340
<u>Type of Operation</u>														
Producing open-pit mines only.....	9	1	30	97	16	30	32	167	58	214	6	11	(NA)	(NA)
Producing mines with preparation plants.....	14	4	264	1,486	200	436	1,016	3,958	1,317	4,788	78	487	(NA)	(NA)
1498.—PEAT.....	109	4	504	1,778	442	948	1,473	5,626	2,604	7,360	<sup>2</sup> 566	870	389	3,640
<u>Geographic Area</u>														
Northeast.....	21	-	73	287	66	149	247	620	320	744	84	196	90	587
Middle Atlantic.....	15	-	59	233	52	118	193	493	260	592	79	161	78	514
East North Central.....	43	3	255	850	231	487	754	3,683	1,659	5,009	322	333	(NA)	(NA)
Michigan.....	28	3	206	626	187	399	568	3,149	1,378	4,288	243	239	140	1,721
West North Central.....	7	1	59	280	52	114	180	391	223	516	30	98	(NA)	(NA)
East.....	26	-	77	244	54	109	177	587	225	687	81	125	(NA)	(NA)
Pacific.....	16	-	62	212	40	77	146	455	174	523	65	106	(NA)	(NA)
<u>Type of Operation</u>														
Producing establishments, total.....	104	4	502	1,770	440	943	1,465	5,632	2,545	7,360	<sup>2</sup> 566	817	(NA)	(NA)
Open-pit and underground mines only.....	61	1	195	580	186	433	559	2,239	1,022	2,915	281	346	(NA)	(NA)
Open-pit mines with preparation plants.....	43	3	307	1,190	254	510	906	3,393	1,523	4,445	<sup>2</sup> 285	471	358	3,378
Drying only.....	18	-	46	200	39	76	166	456	274	627	55	103	(NA)	(NA)

See footnotes at end of table.

TABLE 2. General Statistics by Geographic Areas and Type of Operation:  
1963 and 1958—Continued

Industry, geographic area, and type of operation <sup>1</sup>	1963											1958		
	Establishments		All employees		Production, development, and exploration workers			Value added in mining	Cost of supplies, etc., and purchased machinery installed	Value of shipments and receipts	Quantity of primary products <sup>2</sup>  (1,000 short tons)	Capital expendi- tures	All employees	Value added in mining
	Total	With 20 employ- ees or more	Total	Payroll	Total	Man-hours	Wages							
1499.--NONMETALLIC MINERALS, N.E.C.	87	18	1,878	11,201	1,578	3,324	8,961	32,619	15,855	42,963	(X)	5,511	1,791	23,368
Asbestos subindustry.....	11	4	457	2,560	395	807	2,163	4,445	4,189	5,521	68	3,113	478	3,774
Diatomite subindustry.....	16	8	846	5,928	681	1,492	4,669	21,776	7,630	27,923	554	1,483	857	14,723
Perlite subindustry.....	24	3	219	1,057	181	366	708	2,703	2,014	4,545	2343	172	176	1,772
Vermiculite, greensand, and other nonmetallic minerals subindustry.....	36	3	353	1,633	321	659	1,421	3,695	2,022	4,974	(X)	743	280	3,099
<u>Geographic Area</u>														
Northeast and North Central.....	8	1	242	1,158	203	416	906	3,371	791	3,760	(X)	402	(NA)	(NA)
South Atlantic and East South Central..	11	1	100	335	89	158	269	1,326	525	1,734	(X)	117	(NA)	(NA)
West South Central (Texas).....	8	2	115	502	98	192	336	671	1,124	1,624	(X)	171	(NA)	(NA)
Mountain.....	35	8	522	2,939	470	1,065	2,524	7,493	3,902	10,076	(X)	1,319	599	5,317
New Mexico.....	4	1	46	242	37	70	167	972	307	1,228	(X)	51	101	1,350
Nevada.....	10	3	139	1,030	131	337	937	3,304	1,607	4,206	(X)	705	135	1,513
Pacific.....	25	6	899	6,267	718	1,495	4,926	19,758	9,513	25,769	(X)	3,502	769	13,593
<u>Type of Operation</u>														
Producing open-pit mines with prepara- tion plants.....	59	17	1,750	10,669	1,469	3,110	8,585	31,921	15,310	41,914	(X)	5,317	(NA)	(NA)

Standard Notes: - Represents zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>General statistics for most States are not shown separately in this table in order to avoid disclosing figures for individual companies or because of the relatively small size of the statistics. Such States are shown below for 1963 with the number of establishments in each State (and in parentheses the number of employees or employment size range):

SIC 1481, Nonmetallic Minerals Services: Vermont, 1 (0-4); Rhode Island, 1 (0-4); Connecticut, 1 (5-9); New York, 3 (4); Pennsylvania, 4 (14); Ohio, 9 (31); Indiana, 3 (25); Illinois, 2 (0-4); Michigan, 2 (0-4); Wisconsin, 2 (0-4); Iowa, 3 (11); Missouri, 26 (92); South Dakota, 1 (5-9); West Virginia, 1 (5-9); North Carolina, 3 (23); South Carolina, 1 (0-4); Georgia, 2 (10-19); Florida, 7 (63); Kentucky, 4 (42); Tennessee, 2 (20-49); Alabama, 3 (22); Mississippi, 1 (20-49); Arkansas, 1 (0-4); Oklahoma, 1 (0-4); Texas, 7 (31); Montana, 1 (5-9); Idaho, 2 (50-99); Wyoming, 2 (0-4); Colorado, 3 (8); New Mexico, 5 (115); Arizona, 1 (5-9); Utah, 2 (50-99); Nevada, 2 (0-4); Washington, 2 (20-49); Oregon, 2 (20-49); California, 6 (46).

SIC 1492, Gypsum: New York, 2 (20-49); Michigan, 3 (135); Arkansas, 1 (20-49); Louisiana, 1 (50-99); Oklahoma, 6 (20-49); Texas, 2 (20-49); Montana, 1 (5-9); Wyoming, 1 (0-4); Colorado, 3 (19); New Mexico, 2 (10-19); Arizona, 3 (22); Nevada, 3 (20-49); Washington, 1 (5-9); California, 8 (50-99).

Gypsum Mines in Manufactures: New York, 3 (100-249); Ohio, 2 (20-49); Indiana, 2 (50-99); Michigan, 2 (20-49); Iowa, 5 (50-99); Kansas, 2 (20-49); Virginia, 1 (100-249); Arkansas, 1 (0-4); Oklahoma, 1 (20-49); Texas, 5 (50-99); Montana, 2 (5-9); Wyoming, 1 (0-4); Colorado, 1 (0-4); New Mexico, 1 (0-4); Arizona, 1 (5-9); Utah, 3 (23); Nevada, 2 (50-99); California, 2 (20-49).

SIC 1493, Mica: Pennsylvania, 1 (0-4); South Dakota, 1 (0-4); South Carolina, 1 (10-19); Georgia, 2 (10-19); Florida, 1 (0-4); Alabama, 2 (50-99); Idaho, 1 (0-4); Colorado, 1 (5-9); New Mexico, 3 (40); Arizona, 3 (7); California, 3 (2).

SIC 1494, Native Asphalt and Bitumens: New York, Central Office only (5-9); Ohio, 2 (10-19); Missouri, 1 (0-4); Alabama, 1 (10-19); Oklahoma, 1 (0-4); Texas, 2 (100-249); Utah, 5 (195); Oregon, 1 (5-9).

SIC 1495, Pumice and Pumicite: Nebraska, 1 (0-4); Kansas, 2 (0-4); Oklahoma, 1 (0-4); Texas, 1 (10-19); Idaho, 4 (7); Wyoming, 1 (0-4); Colorado, 5 (14); Utah, 2 (0-4); Nevada, 4 (9); Washington, 2 (0-4); Hawaii, 12 (10-19).

SIC 1496, Talc, Soapstone, and Pyrophyllite: Vermont, 4 (100-249); New York, 3 (250-499); Pennsylvania, 1 (5-9); Maryland, 2 (10-19); Virginia, 1 (250-499); Georgia, 3 (50-99); Alabama, 1 (10-19); Arkansas, 1 (10-19); Texas, 5 (20-49); Montana, 4 (38); Nevada, 6 (4); Washington, 2 (0-4); California, 26 (100-249).

SIC 1497, Natural Abrasives, Except Sand: New York, 4 (138); Pennsylvania, 2 (0-4); Ohio, 1 (0-4); Indiana, 1 (0-4); Illinois, 3 (88); Minnesota, 1 (20-49); Missouri, 1 (20-49); North Carolina, 1 (0-4); Arkansas, 5 (1); Idaho, 3 (11); Washington, 1 (0-4).

SIC 1498, Peat: Maine, 4 (10-99); Vermont, 1 (0-4); Connecticut, 1 (0-4); New York, 3 (5); New Jersey, 3 (14); Pennsylvania, 9 (40); Ohio, 7 (7); Indiana, 2 (20-49); Illinois, 4 (9); Wisconsin, 2 (10-19); Minnesota, 4 (42); Iowa, 2 (10-19); North Dakota, 1 (0-4); Maryland, 3 (4); South Carolina, 1 (10-19); Georgia, 2 (5-9); Florida, 5 (13); Alabama, 1 (0-4); Montana, 1 (0-4); Idaho, 2 (0-4); Colorado, 7 (13); Washington, 11 (10); California, 5 (52).

SIC 1499, Nonmetallic Minerals, N.E.C.: Maine, 1 (0-4); Vermont, 1 (100-249); New York, 2 (10-19); New Jersey, 2 (10-19); Illinois, 1 (0-4); South Dakota, 1 (0-4); Maryland, 2 (10-19); North Carolina, 3 (4); South Carolina, 3 (66); Georgia, 1 (0-4); Florida, 1 (0-4); Kentucky, 1 (10-19); Montana, 3 (151); Idaho, 1 (0-4); Wyoming, 2 (0-4); Colorado, 4 (83); Arizona, 8 (89); Utah, 3 (11); Washington, 1 (10-19); Oregon, 2 (5-9); California, 21 (880); Alaska, 1 (0-4).

<sup>2</sup>Represents the product indicated by the name of the industry. For gypsum and talc, soapstone, and pyrophyllite represents production of crude material. Represents production for all other products except mica and perlite which are shipments. For pumice and pumicite; talc, soapstone, and pyrophyllite; peat; and perlite includes production as a secondary product in other industries, amounting to less than 5 percent of the product total.

<sup>3</sup>Service establishments were permitted to prepare one report for all mining services performed in the United States. The totals shown for number of establishments in this table, and all figures shown for number of establishments in other tables of this report, represent the counts of these reports. However, these reports contained data for total receipts for services, total employment on March 15, and, for 1963, capital expenditures by State and county. All other geographic area information in this table for this industry was obtained by allocating the totals reported by each company on the basis of the reported county data. The number of establishments shown by geographic area represents the number of operations in separate counties.

<sup>4</sup>The number of production, development, and exploration workers was estimated from reported figures for man-hours. No data were obtained on other employees at such operations; hence, the same figures are shown for production, development, and exploration workers and for all employees.

<sup>5</sup>Excludes the cost of purchased machinery for mines classified in manufacturing.

<sup>6</sup>Includes the estimated value of gypsum produced and used in the same establishment in the manufacture of calcined gypsum products.

<sup>7</sup>Excludes data for mines classified in manufacturing.

<sup>8</sup>Includes data for separately reported central offices and related facilities which were not further distributed by type of operation.

TABLE 3. Detailed Statistics for Industries, by Geographic Areas and Selected Types of Operation: 1963

Item	1481.- Nonmetallic minerals services industry	149.-Miscellaneous nonmetallic minerals industries																				
		Total	1492.-Gypsum industry		1493.-Mica industry			1494.- Native asphalt and bitumens industry	1495.- Pumice and pumicite industry	1496.-Talc, soapstone, and pyrophyllite industry												
			United States, all operations	Producing open-pit mines with preparation plants	United States, all operations	South	Producing open-pit mines with preparation plants			United States, all operations	Northeast	South	Under- ground mines with preparation plants									
Establishments, total.....number..	119	453	37	21	34	21	18	13	85	65	8	19	6									
With 0 to 19 employees.....do....	108	400	31	16	28	16	12	9	84	56	4	14	2									
With 20 to 99 employees.....do....	11	43	6	5	6	5	6	3	1	6	2	4	3									
With 100 employees and over.....do....	-	10	-	-	-	-	-	1	-	3	2	1	1									
Including mines.....do....	(X)	453	37	21	34	21	18	13	85	65	8	19	6									
Including preparation plants.....do....	(X)	261	25	21	18	12	18	10	51	32	7	14	6									
Quantity of primary products <sup>1</sup> .....1,000 short tons..	(X)	(X)	3,246	2,179	103	86	87	(D)	<sup>1</sup> 2,308	<sup>1</sup> 873	380	278	269									
Value of shipments and receipts, total.....\$1,000..	13,246	102,446	10,160	6,768	5,560	4,842	4,781	8,509	5,358	17,534	7,992	5,940	6,379									
Minerals transferred to other establishments for preparation and resales.....do....	2	595	-	-	5,560	4,842	4,781	8,509	20	262	7,992	5,940	-									
Net shipments and receipts, total.....do....	13,244	101,851	10,160	6,768										4,993	4,303	4,242	(D)	5,338	17,272	7,878	(D)	6,379
Primary products.....do....	12,751	100,643	9,629	6,237										(D)	(D)	(D)	(D)	5,338	16,595	(D)	(D)	6,379
Other products and services.....do....	493	1,208	531	531	(D)	(D)	(D)	(D)	5,338	677	(D)	(D)	-									
Value added in mining.....do....	9,326	78,325	7,753	5,010	3,925	3,435	3,340	6,333	4,198	13,746	6,300	4,931	5,138									
Persons in industry, total.....number..	960	5,697	477	311	407	337	339	427	293	1,307	438	655	298									
Production, development, and exploration workers (average for year) <sup>2</sup> .....do....	806	4,609	383	246	357	297	296	357	222	1,054	360	557	269									
March.....do....	730	4,445	356	238	324	292	279	366	201	997	342	540	245									
May.....do....	794	4,697	394	256	343	297	298	360	226	1,089	370	576	280									
August.....do....	817	4,769	398	251	364	307	319	360	249	1,095	364	575	286									
November.....do....	761	4,430	383	240	335	294	290	343	208	1,045	365	539	264									
Other employees.....do....	65	868	75	56	41	38	41	65	25	222	78	98	29									
Proprietors and firm members.....do....	89	220	19	9	9	2	2	5	46	31	-	-	-									
Performing manual labor.....do....	66	189	17	6	9	2	2	2	37	30	-	-	-									
Man-hours worked by production, development, and exploration workers, total.....1,000..	1,575	9,663	807	540	733	623	630	728	428	2,229	832	1,136	611									
At mines, total.....do....	(X)	4,437	604	375	241	192	138	533	266	1,203	301	711	275									
Underground <sup>3</sup> .....do....	150	1,095	84	-	-	-	-	242	6	635	268	269	238									
Open-pits <sup>4</sup> .....do....	256	2,453	429	359	209	162	121	135	239	307	10	247	-									
Surface (including mine shops and yards) <sup>5</sup> .....do....	810	889	91	16	32	30	17	156	21	261	23	195	37									
At preparation plants <sup>6</sup> .....do....	359	5,226	203	165	492	431	492	195	162	1,026	531	425	336									
Man-hours spent on development and exploration work (included above).....do....	(NA)	218	1	-	17	16	17	46	5	35	26	2	16									
Principal expenses designated below, total.....\$1,000..	8,871	57,073	5,228	3,562	3,573	3,102	3,150	4,871	2,391	11,095	4,971	3,545	3,220									
Wages of production, develop- ment, and exploration workers.....do....	4,209	22,788	1,913	1,241	1,299	1,090	1,124	1,723	981	5,390	2,594	2,045	1,598									
Salaries of all other employees.....do....	372	5,686	493	348	283	263	283	518	75	1,237	359	312	220									
Supplies.....do....	2,666	15,960	1,851	1,448	1,069	927	966	1,082	796	2,973	1,471	826	1,021									
Minerals received for preparation.....do....	-	555	-	-	306	306	306	-	-	262												
Purchases for resale.....do....	1	233	-	-																		
Purchased fuel.....do....	602	3,495	297	258							212	175	187	178	197	269	127	104	96			
Purchased electric energy.....do....	70	3,160	224	96	228	188	218	342	63	662	416	161	285									
Contract work.....do....	951	5,196	450	171	176	153	66	1,025	263	302	4	97	-									
Purchased machinery installed.....do....	1,064	7,451	864	692	504	378	449	627	507	468	183	100	182									
Capital expenditures, total.....do....	1,434	11,929	1,279	907	860	720	751	1,081	682	1,148	509	279	343									
Development and exploration of mineral property.....do....	6	1,520	90	57	96	36	35	391	80	205	132	37	56									
Preparation plant and other construction.....do....	274	2,653	206	188	95	77	83	199	171	220	112	74	97									
New machinery and equipment.....do....	922	6,610	862	558	448	397	417	480	356	630	257	135	185									
Used plant and equipment.....do....	232	1,146	121	104	221	210	216	11	75	93	8	33	-									

See footnotes at end of table.

TABLE 3. Detailed Statistics for Industries, by Geographic Areas and Selected Types of Operation: 1963—Continued

Item	149.--Miscellaneous nonmetallic minerals industries--Continued										
	1497.-- Natural abrasives, except sand, industry	1498.--Peat industry		1499.--Nonmetallic minerals, n.e.c., industry							
		United States, all operations	East North Central	United States, all operations	Mountain	Pacific	Producing open-pit mines with preparation plants	Subindustries			
								Asbestos	Diatomite	Perlite	Vermiculite and other minerals
Establishments, total.....number..	23	109	43	87	35	25	59	11	16	24	36
With 0 to 19 employees.....do....	18	105	40	69	27	19	42	7	8	21	33
With 20 to 99 employees.....do....	4	4	3	13	7	3	12	2	6	3	2
With 100 employees and over.....do....	1	-	-	5	1	3	5	2	2	-	1
Including mines.....do....	23	109	43	87	35	25	59	11	16	24	36
Including preparation plants.....do....	14	43	18	68	24	18	59	10	15	16	27
Quantity of primary products <sup>1</sup> .....1,000 short tons..	84	1566	322	(X)	(X)	(X)	(X)	68	554	1343	(X)
Value of shipments and receipts, total.....\$1,000..	5,002	7,360	5,009	42,963	10,076	25,769	41,914	5,521	27,923	4,545	4,974
Minerals transferred to other establishments for preparation and resales.....do....	1	-	-	52	10,076	25,769	52	5,521	-	4,545	4,974
Net shipments and receipts, total.....do....	5,001	7,360	5,009	42,911							
Primary products.....do....	5,001	7,360	5,007 2	42,911			10,066 (D)		(D) -		
Other products and services.....do....	-										
Value added in mining.....do....	4,125	5,626	3,683	32,619	7,493	19,758	31,921	4,445	21,776	2,703	3,695
Persons in industry, total.....number..	312	571	288	1,903	534	908	1,758	460	852	229	362
Production, development, and exploration workers (average for year) <sup>2</sup> .....do....	216	442	231	1,578	470	718	1,469	395	681	181	321
March.....do....	222	444	283	1,535	461	684	1,428	390	640	186	319
May.....do....	212	510	291	1,563	452	720	1,453	395	673	178	317
August.....do....	224	412	209	1,667	494	780	1,551	425	721	182	339
November.....do....	205	379	139	1,532	464	687	1,429	368	672	174	318
Other employees.....do....	78	62	24	300	52	181	281	62	168	38	32
Proprietors and firm members.....do....	18	67	33	25	12	9	8	3	3	10	9
Performing manual labor.....do....	12	60	29	22	10	8	8	3	3	10	6
Man-hours worked by production, development, and exploration workers, total.....1,000..	466	948	487	3,324	1,065	1,495	3,110	807	1,492	366	659
At mines, total.....do....	135	519	222	936	413	206	794	235	238	157	306
Underground <sup>3</sup> .....do....	27	4	4	97	91	4	-	85	-	5	7
Open-pits <sup>4</sup> .....do....	77	409	186	648	198	195	609	94	209	103	242
Surface (including mine shops and yards) <sup>5</sup> .....do....	31	106	32	191	124	7	185	56	29	49	57
At preparations plants <sup>6</sup> .....do....	331	429	265	2,388	652	1,289	2,316	572	1,254	209	353
Man-hours spent on development and exploration work (included above).....do....	-	8	6	106	30	11	84	51	30	-	25
Principal expenses designated below, total.....\$1,000..	2,879	3,644	2,237	23,392	5,982	13,399	22,439	5,147	12,343	2,856	3,046
Wages of production, develop- ment, and exploration workers.....do....	1,048	1,473	754	8,961	2,524	4,926	8,585	2,163	4,669	708	1,421
Salaries of all other employees.....do....	535	305	96	2,240	415	1,341	2,084	397	1,282	349	212
Supplies.....do....	900	1,002	800	6,287	1,823	7,341	6,213	876	73,694	71,025	893
Minerals received for preparation.....do....	-	-	-	201	(?)	(?)	-	-	(?)	(?)	-
Purchases for resale.....do....	-	-	-	-	-	-	-	-	-	-	-
Purchased fuel.....do....	157	423	197	1,762	536	982	1,728	223	1,077	206	256
Purchased electric energy.....do....	151	91	78	1,399	375	764	1,380	271	812	147	169
Contract work.....do....	88	350	312	2,542	309	1,971	2,449	1,217	809	421	95
Purchased machinery installed.....do....	79	738	272	3,664	859	2,381	3,540	1,602	1,238	215	609
Capital expenditures, total.....do....	498	870	333	5,511	1,319	3,502	5,317	3,113	1,483	172	743
Development and exploration of mineral property.....do....	12	9	3	637	108	141	589	446	103	10	78
Preparation plant and other construction.....do....	258	48	11	1,456	339	1,052	1,411	1,035	105	72	244
New machinery and equipment.....do....	203	603	271	3,028	652	2,139	2,928	1,502	1,015	90	421
Used plant and equipment.....do....	25	210	48	390	220	170	389	130	260	-	-

See footnotes at end of table.



TABLE 3. Detailed Statistics for Industries, by Geographic Areas and Selected Types of Operation: 1963—Continued

Item	1481.-- Nonmetallic minerals services industry	149.--Miscellaneous nonmetallic minerals industries											
		Total	1492.--Gypsum industry		1493.--Mica industry			1494.-- Native asphalt and bitumens industry	1495.-- Pumice and pumicite industry	1496.--Talc, soapstone, and pyrophyllite industry			
			United States, all operations	Producing open-pit mines with preparation plants	United States, all operations	South	Producing open-pit mines with preparation plants			United States, all operations	Northeast	South	Under- ground mines with preparation plants
Energy used....million kwh. equivalent..	219	1,822	122	106	113	105	110	75	63	151	84	53	62
Coal.....1,000 short tons..	3	2	-	-	2	2	2	-	-	-	-	-	-
Distillate fuel oil....1,000 barrels..	21	189	19	17	20	19	20	22	2	32	23	7	18
Residual fuel oil.....do....	1	145	18	18	(2)	(2)	(2)	(2)	(2)	4	-	2	-
Gas.....million cu. ft..	280	2,318	60	60	129	121	129	-	58	41	-	41	-
Gasoline.....1,000 gallons..	778	1,446	130	114	58	52	58	181	120	171	53	77	55
Other fuels.....\$1,000..	35	160	17	17	11	3	6	10	69	4	1	3	1
Undistributed.....do....	119	582	60	37	6	3	-	-	74	41	1	31	-
Electric energy purchased.....million kwh..	6	272	15	8	17	16	17	28	3	59	42	14	29
Electric energy generated and used.....do....	(2)	7	(2)	(2)	-	-	-	-	(2)	(2)	(2)	-	-
Horsepower rating of power equip- ment (prime movers and electric motors driven by purchased energy).....1,000 hp..	69	312	32	26	25	21	23	34	26	48	17	21	13
Per production worker.....hp..	86	68	84	106	74	76	78	95	117	46	47	38	48
Prime movers.....1,000 hp..	65	182	19	17	17	14	15	18	21	22	3	12	2
Electric motors driven by purchased energy.....do....	4	130	13	9	8	7	8	16	5	26	14	9	11
Horsepower rating of electric motors driven by energy generated at the establishment....do....	1	5	(2)	(2)	(2)	(2)	(2)	-	(2)	-	-	-	-
		149.--Miscellaneous nonmetallic minerals industries--Continued											
	1497.-- Natural abrasives, except sand, industry	1498.--Peat industry		1499.--Nonmetallic minerals, n.e.c., industry									
		United States, all operations	East North Central	United States, all operations	Mountain	Pacific	Producing open-pit mines with preparation plants	Subindustries					
								Asbestos	Diatomite	Perlite	Vermiculite and other minerals		
Energy used....million kwh. equivalent..	70	83	34	1,127	289	711	1,118	111	765	102			149
Coal.....1,000 short tons..	-	(2)	-	-	-	-	-	-	-	-	-	-	-
Distillate fuel oil....1,000 barrels..	24	1	(2)	69	31	31	68	21	22	15			11
Residual fuel oil.....do....	-	(2)	-	123	74	9	123	22	30	16			55
Gas.....million cu. ft..	49	8	7	1,973	192	1,781	1,973	2	1,872	99			-
Gasoline.....1,000 gallons..	39	170	61	577	187	183	549	89	238	118			132
Other fuels.....\$1,000..	6	18	15	25	7	12	15	2	12	5			6
Undistributed.....do....	6	346	104	49	26	7	41	15	6	17			11
Electric energy purchased.....million kwh..	11	2	1	137	28	82	135	27	83	7			20
Electric energy generated and used.....do....	(2)	(2)	-	7	-	7	7	7	-	-			-
Horsepower rating of power equip- ment (prime movers and electric motors driven by purchased energy).....1,000 hp..	17	26	11	104	42	36	92	25	39	15			25
Per production worker.....hp..	79	59	48	66	89	50	63	63	57	83			78
Prime movers.....1,000 hp..	13	24	10	48	27	7	40	10	13	8			17
Electric motors driven by purchased energy.....do....	4	2	1	56	15	29	52	15	26	7			8
Horsepower rating of electric motors driven by energy generated at the establishment....do....	(2)	(2)	-	5	-	-	4	-	4	-			-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
(Z) Less than one-half of the unit of measure specified.

n.e.c. Not elsewhere classified.

<sup>1</sup>Represents the product indicated by the name of the industry. For gypsum and talc, soapstone, and pyrophyllite, represents production of crude material.  
Represents production for all other products except mica and perlite, which are shipments. For pumice and pumicite; talc, soapstone, and pyrophyllite; peat; and perlite includes production as a secondary product in other industries, amounting to less than 5 percent of the product total.

Footnotes continued on next page.

TABLE 3. Detailed Statistics for Industries, by Geographic Areas and Selected Types of Operation: 1963 -Continued

Footnotes for Table 3-14F--continued

<sup>2</sup>Number of production, development, and exploration workers for all months was collected for the Nonmetallic Minerals Services Industry and for the Miscellaneous Minerals, N.E.C., Industries. For these industries the United States totals by months are:

Industry	January	February	March	April	May	June	July	August	September	October	November	December
Nonmetallic minerals services.....	709	705	730	739	794	842	797	817	719	870	761	747
Gypsum.....	350	350	356	373	394	384	398	398	393	389	383	382
Mica.....	316	322	324	329	343	333	336	364	331	320	335	321
Native asphalt and bitumens.....	353	361	366	367	360	367	358	360	350	339	343	342
Pumice and pumicite.....	197	196	201	262	226	247	255	249	236	224	208	202
Talc, soapstone, and pyrophyllite.....	957	966	997	1,045	1,089	1,069	1,058	1,095	1,044	1,020	1,045	999
Natural abrasives, except sand.....	217	215	222	209	212	218	221	224	213	209	205	199
Peat.....	263	312	444	567	510	447	412	412	409	425	379	337
Nonmetallic minerals, n.e.c.....	1,543	1,540	1,535	1,546	1,563	1,591	1,621	1,667	1,560	1,509	1,532	1,526

n.e.c. Not elsewhere classified.

<sup>3</sup>For the Nonmetallic Minerals Services Industry represents man-hours on exploration work, including geophysical and other exploratory surveying.

<sup>4</sup>For the Nonmetallic Minerals Services Industry represents man-hours on stripping overburden.

<sup>5</sup>For the Nonmetallic Minerals Services Industry represents man-hours on mining minerals for the account of others.

<sup>6</sup>For the Nonmetallic Minerals Services Industry represents man-hours on other services such as drilling.

<sup>7</sup>Figures for purchases for resale are included with those for supplies.

TABLE 4A. Selected Statistics, by Employment Size of Establishment: 1963—Continued

Item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1481.—NONMETALLIC MINERALS SERVICES											
Establishments.....number..	119	72	25	11	8	3	-	-	-	-	-
All employees:											
Total.....do....	871	138	161	149	245	178	-	-	-	-	-
Payroll.....\$1,000..	4,581	458	752	496	1,491	1,384	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	806	133	146	130	225	172	-	-	-	-	-
Man-hours.....1,000..	1,575	251	288	231	470	335	-	-	-	-	-
Wages.....\$1,000..	4,209	451	662	464	1,271	1,361	-	-	-	-	-
Value added in mining.....do....	9,326	1,698	1,593	971	2,570	2,494	-	-	-	-	-
Value of shipments and receipts.....do....	13,246	2,162	2,137	1,415	4,120	3,412	-	-	-	-	-
Capital expenditures.....do....	1,434	336	345	148	152	453	-	-	-	-	-
1492.—GYPSUM											
Establishments.....number..	37	13	12	6	4	2	-	-	-	-	-
All employees:											
Total.....do....	458	20	94	89	255	(D)	-	-	-	-	-
Payroll.....\$1,000..	2,406	54	499	481	1,372	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	383	18	74	76	215	(D)	-	-	-	-	-
Man-hours.....1,000..	807	34	158	153	462	(D)	-	-	-	-	-
Wages.....\$1,000..	1,913	49	374	410	1,080	(D)	-	-	-	-	-
Value added in mining.....do....	7,753	270	1,423	1,510	4,550	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	10,160	656	1,657	1,716	6,131	(D)	-	-	-	-	-
Capital expenditures.....do....	1,279	52	181	569	477	(D)	-	-	-	-	-
Producing establishments by type of operation, total.....number..	34	10	12	6	4	2	-	-	-	-	-
Open-pit mines only.....do....	9	6	3	-	-	-	-	-	-	-	-
Mines with preparation plants:											
Open-pit.....do....	21	4	8	4	4	1	-	-	-	-	-
Underground.....do....	3	-	1	2	-	-	-	-	-	-	-
Combination open-pit and underground mines.....do....	1	-	-	-	-	1	-	-	-	-	-
1493.—MICA											
Establishments.....number..	34	17	3	8	4	2	-	-	-	-	-
All employees:											
Total.....do....	398	23	21	110	244	(D)	-	-	-	-	-
Payroll.....\$1,000..	1,582	79	66	422	1,015	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	357	15	20	105	217	(D)	-	-	-	-	-
Man-hours.....1,000..	733	31	52	173	477	(D)	-	-	-	-	-
Wages.....\$1,000..	1,299	54	60	373	812	(D)	-	-	-	-	-
Value added in mining.....do....	3,925	575	138	923	2,289	(D)	-	-	-	-	-
Value of shipments and receipts.....do....	5,560	711	182	1,310	3,357	(D)	-	-	-	-	-
Capital expenditures.....do....	860	96	39	97	628	(D)	-	-	-	-	-
Producing establishments by type of operation, total.....number..	30	14	3	7	4	2	-	-	-	-	-
Open-pit mines only.....do....	12	9	1	2	-	-	-	-	-	-	-
Open-pit mines with preparation plants.....do....	18	5	2	5	4	2	-	-	-	-	-
1494.—NATIVE ASPHALT AND BITUMENS											
Establishments.....number..	13	4	3	2	1	2	1	-	-	-	-
All employees:											
Total.....do....	422	12	92	(D)	(D)	318	(D)	-	-	-	-
Payroll.....\$1,000..	2,241	42	620	(D)	(D)	1,579	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	357	12	82	(D)	(D)	263	(D)	-	-	-	-
Man-hours.....1,000..	728	23	166	(D)	(D)	539	(D)	-	-	-	-
Wages.....\$1,000..	1,723	42	474	(D)	(D)	1,207	(D)	-	-	-	-
Value added in mining.....do....	6,333	73	948	(D)	(D)	5,312	(D)	-	-	-	-
Value of shipments and receipts.....do....	8,509	83	1,073	(D)	(D)	7,353	(D)	-	-	-	-
Capital expenditures.....do....	1,081	3	155	(D)	(D)	923	(D)	-	-	-	-
Producing establishments by type of operation, total.....number..	13	4	3	2	1	2	1	-	-	-	-
Mines only:											
Open-pit.....do....	3	2	1	-	-	-	-	-	-	-	-
Underground.....do....	1	-	1	-	-	-	-	-	-	-	-
Mines with preparation plants:											
Open-pit.....do....	6	2	1	1	-	2	-	-	-	-	-
Underground.....do....	3	-	-	1	1	-	1	-	-	-	-

See footnotes at end of table.

TABLE 4A. Selected Statistics, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1495.—PUMICE AND PUMICITE											
Establishments.....number..	85	70	9	5	1	-	-	-	-	-	-
All employees:											
Total.....do....	247	99	54	94	(D)	-	-	-	-	-	-
Payroll.....\$1,000..	1,056	412	263	<u>381</u>	(D)	-	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	222	92	47	83	(D)	-	-	-	-	-	-
Man-hours.....1,000..	428	163	97	<u>168</u>	(D)	-	-	-	-	-	-
Wages.....\$1,000..	981	394	235	<u>352</u>	(D)	-	-	-	-	-	-
Value added in mining.....do....	4,198	2,313	569	<u>1,316</u>	(D)	-	-	-	-	-	-
Value of shipments and receipts.....do....	5,358	2,976	745	<u>1,637</u>	(D)	-	-	-	-	-	-
Capital expenditures.....do....	682	393	78	<u>211</u>	(D)	-	-	-	-	-	-
Producing establishments by type of operation, total.....number..	84	69	9	5	1	-	-	-	-	-	-
Mines only:											
Open-pit.....do....	32	29	3	-	-	-	-	-	-	-	-
Underground.....do....	1	1	-	-	-	-	-	-	-	-	-
Open-pit mines with preparation plants.....do....	51	39	6	5	1	-	-	-	-	-	-
1496.—TALC, SOAPSTONE, AND PYROPHYLLITE											
Establishments.....number..	65	36	7	13	2	4	2	1	-	-	-
All employees:											
Total.....do....	11,276	56	45	245	(D)	244	657	(D)	-	-	-
Payroll.....\$1,000..	16,627	259	214	<u>1,270</u>	(D)	1,074	<u>3,415</u>	(D)	-	-	-
Production, development, and exploration workers:											
Total.....number..	1,054	48	40	200	(D)	221	545	(D)	-	-	-
Man-hours.....1,000..	2,229	75	81	<u>420</u>	(D)	481	<u>1,172</u>	(D)	-	-	-
Wages.....\$1,000..	5,390	251	201	<u>939</u>	(D)	885	<u>3,114</u>	(D)	-	-	-
Value added in mining.....do....	13,746	1,004	514	<u>2,845</u>	(D)	2,213	<u>7,170</u>	(D)	-	-	-
Value of shipments and receipts.....do....	17,534	953	858	<u>4,024</u>	(D)	2,914	<u>8,785</u>	(D)	-	-	-
Capital expenditures.....do....	1,148	204	126	<u>352</u>	(D)	98	<u>368</u>	(D)	-	-	-
Producing establishments by type of operation, total.....number..	61	32	7	13	2	4	2	1	-	-	-
Mines only:											
Open-pit.....do....	20	17	1	2	-	-	-	-	-	-	-
Underground.....do....	16	13	2	1	-	-	-	-	-	-	-
Combination open-pit and underground.....do....	1	-	-	1	-	-	-	-	-	-	-
Mines with preparation plants:											
Open-pit.....do....	15	2	3	8	1	-	-	1	-	-	-
Underground.....do....	6	-	1	1	1	2	1	-	-	-	-
Combination open-pit and underground.....do....	3	-	-	-	-	2	1	-	-	-	-
1497.—NATURAL ABRASIVES, EXCEPT SAND											
Establishments.....number..	23	13	4	1	4	-	1	-	-	-	-
All employees:											
Total.....do....	294	15	64	(D)	215	-	(D)	-	-	-	-
Payroll.....\$1,000..	1,583	53	<u>391</u>	(D)	<u>1,139</u>	-	(D)	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	216	8	37	(D)	171	-	(D)	-	-	-	-
Man-hours.....1,000..	466	13	<u>63</u>	(D)	<u>390</u>	-	(D)	-	-	-	-
Wages.....\$1,000..	1,048	53	<u>159</u>	(D)	<u>836</u>	-	(D)	-	-	-	-
Value added in mining.....do....	4,125	170	667	(D)	3,288	-	(D)	-	-	-	-
Value of shipments and receipts.....do....	5,002	232	<u>795</u>	(D)	<u>3,975</u>	-	(D)	-	-	-	-
Capital expenditures.....do....	498	46	<u>33</u>	(D)	<u>419</u>	-	(D)	-	-	-	-
Producing establishments by type of operation, total.....number..	23	13	4	1	4	-	1	-	-	-	-
Open-pit mines only.....do....	9	8	-	-	1	-	-	-	-	-	-
Mines with preparation plants:											
Open-pit.....do....	11	4	4	-	2	-	1	-	-	-	-
Underground.....do....	3	1	-	1	1	-	-	-	-	-	-
1498.—PEAT											
Establishments.....number..	109	84	12	9	2	2	-	-	-	-	-
All employees:											
Total.....do....	504	116	84	<u>304</u>	(D)	(D)	-	-	-	-	-
Payroll.....\$1,000..	1,778	373	264	<u>1,141</u>	(D)	(D)	-	-	-	-	-
Production, development, and exploration workers:											
Total.....number..	442	114	70	<u>258</u>	(D)	(D)	-	-	-	-	-
Man-hours.....1,000..	948	251	149	<u>548</u>	(D)	(D)	-	-	-	-	-
Wages.....\$1,000..	1,473	361	221	<u>891</u>	(D)	(D)	-	-	-	-	-

See footnotes at end of table.

TABLE 4A. Selected Statistics, by Employment Size of Establishment: 1963—Continued

Item	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1498.—PEAT—Continued											
Value added in mining.....\$1,000..	5,626	1,076	642	<u>3,908</u>	(D)	(D)	-	-	-	-	-
Value of shipments and receipts.....do...	7,360	1,261	767	<u>5,332</u>	(D)	(D)	-	-	-	-	-
Capital expenditures.....do...	870	375	111	<u>384</u>	(D)	(D)	-	-	-	-	-
Producing establishments by type of operation, total.....number..	104	79	12	9	2	2	-	-	-	-	-
Mines only:											
Open-pit.....do...	60	52	5	2	-	1	-	-	-	-	-
Underground.....do...	1	1	-	-	-	-	-	-	-	-	-
Open-pit mines with preparation plants.....do...	43	26	7	7	2	1	-	-	-	-	-
1499.—NONMETALLIC MINERALS, N.E.C.											
Establishments.....number..	87	47	14	8	11	2	4	-	1	-	-
All employees:											
Total.....do...	1,878	71	95	104	495	(D)	1,108	-	(D)	-	-
Payroll.....\$1,000..	11,201	278	355	565	<u>2,712</u>	(D)	<u>7,257</u>	-	(D)	-	-
Production, development, and exploration workers:											
Total.....number..	1,578	68	83	92	433	(D)	902	-	(D)	-	-
Man-hours.....1,000..	3,326	131	167	185	957	(D)	1,886	-	(D)	-	-
Wages.....\$1,000..	8,961	244	312	474	<u>2,160</u>	(D)	<u>5,771</u>	-	(D)	-	-
Value added in mining.....do...	32,619	748	698	1,740	<u>7,477</u>	(D)	21,956	-	(D)	-	-
Value of shipments and receipts.....do...	42,963	961	1,100	1,677	<u>10,343</u>	(D)	28,882	-	(D)	-	-
Capital expenditures.....do...	5,511	220	259	1,571	<u>1,635</u>	(D)	1,826	-	(D)	-	-
Producing establishments by type of operation, total.....number..	82	30	12	8	11	2	4	-	1	-	-
Mines only:											
Open-pit.....do...	15	11	3	1	-	-	-	-	-	-	-
Underground.....do...	2	2	-	-	-	-	-	-	-	-	-
Mines with preparation plants:											
Open-pit.....do...	59	27	8	7	10	2	4	-	1	-	-
Underground.....do...	6	4	1	-	1	-	-	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left. (NA) Not available. (X) Not applicable. n.e.c. Not elsewhere classified.

<sup>1</sup>Includes data for separately reported central offices and related facilities which were not distributed by size of establishment.

TABLE 4B. Producing Establishments With Preparation Plants, by Employment Size of Establishment: 1963

Mineral preparation method	Establishments, total	Establishments with an average of—									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1492.--GYPSUM											
Number of establishments with preparation plants...	25	4	9	6	4	2	-	-	-	-	-
Number of establishments reporting specified preparation method: <sup>1</sup>											
Crushing, grinding, pulverizing, or shredding.....	23	4	7	6	4	2	-	-	-	-	-
Screening.....	14	2	4	4	2	2	-	-	-	-	-
Washing.....	1	-	-	-	1	-	-	-	-	-	-
Drying.....	1	-	-	-	1	-	-	-	-	-	-
1493.--MICA											
Number of establishments with preparation plants...	18	5	2	5	4	2	-	-	-	-	-
Number of establishments reporting specified preparation method: <sup>1</sup>											
Crushing, grinding, pulverizing, or shredding.....	16	4	2	4	4	2	-	-	-	-	-
Screening.....	14	3	2	5	3	1	-	-	-	-	-
Washing.....	6	-	-	4	1	1	-	-	-	-	-
Air separation.....	4	-	1	2	-	1	-	-	-	-	-
Flotation and gravity.....	4	1	-	2	-	1	-	-	-	-	-
1494.--NATIVE ASPHALT AND BITUMENS											
Number of establishments with preparation plants...	9	2	1	2	1	2	1	-	-	-	-
Number of establishments reporting specified preparation method: <sup>1</sup>											
Crushing, grinding, pulverizing, or shredding.....	9	2	1	2	1	2	1	-	-	-	-
Screening.....	7	1	-	2	1	2	1	-	-	-	-
Washing.....	3	-	-	1	1	-	1	-	-	-	-
Drying.....	1	-	-	-	-	-	1	-	-	-	-
1495.--PUMICE AND PUMICITE											
Number of establishments with preparation plants...	51	39	6	5	1	-	-	-	-	-	-
Number of establishments reporting specified preparation method: <sup>1</sup>											
Crushing, grinding, pulverizing, or shredding.....	45	34	6	4	1	-	-	-	-	-	-
Screening.....	38	30	5	2	1	-	-	-	-	-	-
Drying.....	6	3	1	1	1	-	-	-	-	-	-
Air separation.....	3	1	1	1	-	-	-	-	-	-	-
Calcining.....	2	1	-	1	-	-	-	-	-	-	-
Washing.....	1	1	-	-	-	-	-	-	-	-	-
1496.--TALC, SOAPSTONE, AND PYROPHYLLITE											
Number of establishments with preparation plants...	24	2	4	9	2	4	2	1	-	-	-
Number of establishments reporting specified preparation method: <sup>1</sup>											
Crushing, grinding, pulverizing, or shredding.....	21	2	4	7	2	4	2	-	-	-	-
Screening.....	8	-	-	-	2	4	2	-	-	-	-
Drying.....	12	-	-	5	1	4	2	-	-	-	-
Air separation.....	5	-	-	-	1	3	1	-	-	-	-
Flotation and gravity.....	4	-	-	-	-	2	1	1	-	-	-
Washing.....	2	-	-	1	1	-	-	-	-	-	-
Calcining.....	1	-	-	-	-	1	-	-	-	-	-
1497.--NATURAL ABRASIVES, EXCEPT SAND											
Number of establishments with preparation plants...	14	5	4	1	3	-	1	-	-	-	-
Number of establishments reporting specified preparation method: <sup>1</sup>											
Crushing, grinding, pulverizing, or shredding.....	10	2	3	1	3	-	1	-	-	-	-
Screening.....	7	2	3	-	1	-	1	-	-	-	-
Washing.....	4	-	2	-	1	-	1	-	-	-	-
Flotation and gravity.....	4	-	2	-	1	-	1	-	-	-	-
Air separation.....	4	2	-	-	1	-	1	-	-	-	-
Drying.....	3	-	-	-	2	-	1	-	-	-	-
1498.--PEAT											
Number of establishments with preparation plants...	43	26	7	7	2	1	-	-	-	-	-
Number of establishments reporting specified preparation method: <sup>1</sup>											
Drying.....	32	23	4	3	1	1	-	-	-	-	-
Crushing, grinding, pulverizing, or shredding.....	22	15	3	3	-	1	-	-	-	-	-
Screening.....	10	2	2	4	1	1	-	-	-	-	-
Kiln drying.....	2	-	1	-	1	-	-	-	-	-	-
Flotation and gravity.....	2	1	1	-	1	-	-	-	-	-	-

See footnotes at end of table.

**TABLE 4B. Producing Establishments With Preparation Plants, by Employment Size of Establishment: 1963--Continued**

Mineral preparation method	Establishments, total	Establishments with an average of--									
		0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 employees and over
1499.--NONMETALLIC MINERALS, N.E.C.											
Number of establishments with preparation plants....	65	31	9	7	11	2	4	-	1	-	-
Number of establishments reporting specified preparation method: <sup>1</sup>											
Crushing, grinding, pulverizing, or shredding.....	57	30	7	5	8	2	4	-	1	-	-
Screening.....	50	26	6	6	7	2	3	-	-	-	-
Drying.....	26	1	5	5	8	2	4	-	1	-	-
Air separation.....	15	1	2	3	6	-	2	-	1	-	-
Calcining.....	11	4	2	1	2	-	1	-	1	-	-
Washing.....	8	1	1	4	-	1	1	-	-	-	-
Flotation, gravity, and other... ..	10	1	3	-	3	2	1	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Some establishments reported more than one mineral preparation method used and are included in the line for each method reported.

**TABLE 5. Industry-Product Analysis—Summary of Industry Shipments and Receipts and Net Shipments of Primary Products: 1963 and 1958**

(In thousands of dollars)

Ind. code	Industry and year	Value of shipments and receipts of establishments classified in the industry					Value of net shipments of primary products of the industry shipped by establishments in all industries or receipts for primary services by all industries		
		Total	Primary products or services	Secondary products	Receipts for secondary services	Products purchased and resold without further processing	Total (produced or performed in all industries)	Produced or performed in this industry	Produced or performed in other industries
1481	Nonmetallic minerals services.....1963..	13,246	12,751	-	493	2	13,134	12,751	383
	1958..	7,934	7,282	-	652	-	7,371	7,282	89
1492	Gypsum.....1963..	10,160	9,629	(D)	(D)	-	138,345	9,629	128,716
	1958..	7,048	7,036	4	8	-	134,160	7,036	127,124
1493	Mica.....1963..	5,360	(D)	(D)	9	11	8,885	4,993	3,892
	1958..	6,221	6,103	113	-	5	10,490	6,103	24,387
1494	Native asphalt and bitumens.....1963..	8,509	(D)	(D)	-	(D)	8,199	(D)	(D)
	1958..	8,041	8,027	-	14	-	8,027	8,027	-
1495	Pumice and pumicite.....1963..	5,358	(D)	(D)	-	20	5,460	(D)	(D)
	1958..	5,002	(D)	(D)	-	-	5,006	(D)	(D)
1496	Talc, soapstone, and pyrophyllite.....1963..	17,534	16,857	566	111	-	16,833	16,595	238
	1958..	14,908	14,607	271	30	-	19,167	(D)	(D)
1497	Natural abrasives, except sand.....1963..	5,002	5,001	-	-	1	5,001	5,001	-
	1958..	3,373	(D)	(D)	-	-	3,510	(D)	(D)
1498	Peat.....1963..	7,360	(D)	-	(D)	-	7,374	(D)	(D)
	1958..	4,379	(D)	(D)	50	9	4,253	(D)	(D)
1499	Nonmetallic minerals, n.e.c.....1963..	42,963	42,955	(D)	(D)	(D)	44,240	(D)	(D)
	1958..	31,611	31,493	111	2	5	31,349	(D)	(D)

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Includes the estimated value of gypsum produced and used the same establishment in the manufacture of calcined gypsum products. Excludes crushed, ground, screened, and dried gypsum produced in establishments which did not mine gypsum.

<sup>2</sup>Represents gross shipments from other industries, principally material processed in the manufacturing industries.

**TABLE 6A. Primary Products and Services of the Industries, by Geographic Areas:  
1963 and 1958**

Type of service and geographic area		Receipts for services (\$1,000)	
		1963	1958
NONMETALLIC MINERALS SERVICES			
United States, total.....		13,134	7,371
Prospect and test drilling.....		1,112	1,558
Other drilling, including blasting.....		1,595	
Stripping overburden.....		1,494	
Mining minerals for others.....		6,073	4,317
Sinking mine shafts, driving mine tunnels, exploration work, and other work.....		2,860	1,496
Northeast and North Central Regions, total.....		2,829	(NA)
Stripping overburden and mining minerals for others.....		2,185	(NA)
Other work.....		644	(NA)
South Region, total.....		3,064	(NA)
Stripping overburden and mining minerals for others.....		2,321	(NA)
Other work.....		743	(NA)
West Region, total.....		7,241	(NA)
Drilling.....		1,626	(NA)
Stripping overburden and mining minerals for others.....		3,061	(NA)
Sinking mine shafts and other work.....		2,554	(NA)

Product and geographic area	Unit of measure	1963			1958		
		Total production (quantity)	Total shipments (in- cluding interplant transfers)		Total production (quantity)	Total shipments (in- cluding interplant transfers)	
			Quantity	Value (\$1,000)		Quantity	Value (\$1,000)
GYPSUM							
United States:							
Crude gypsum, total.....	1,000 short tons	10,176	339	1,094	9,384	737	1,414
Produced by mines classified in the Gypsum Industry.....	..do.....	3,246	339	1,094	2,569	737	1,414
Produced by mines included in establishments classified in manu- facturing industries <sup>1</sup> .....	..do.....	6,930	-	-	6,815	-	-
Crude gypsum mined and prepared at the same establishment in the Gypsum Industry.....	..do.....	2,838	(X)	(X)	1,832	(X)	(X)
Crushed, ground, screened, or dried gypsum, total.....	..do.....	(NA)	4,736	19,757	(NA)	3,829	15,939
Produced at preparation plants included in establishments classi- fied in the Gypsum Industry.....	..do.....	2,837	2,812	8,535	1,830	1,825	5,622
Produced at preparation plants included in establishments classi- fied in manufacturing industries.....	..do.....	(NA)	1,924	11,222	(NA)	2,004	10,317
Northeast and North Central Regions:							
Crude gypsum, total.....	..do.....	4,602	-	-	4,565	-	-
Produced by mines classified in the Gypsum Industry.....	..do.....	1,241	-	-	916	-	-
Produced by mines included in establishments classified in manu- facturing industries <sup>1</sup> .....	..do.....	3,361	-	-	3,649	-	-
Crushed, ground, screened, or dried gypsum.....	..do.....	(NA)	2,054	9,162	(NA)	1,860	8,792
Middle Atlantic Division (New York), crude gypsum.....	..do.....	615	-	-	818	-	-
East North Central Division, crude gypsum.....	..do.....	2,348	-	-	3,747	-	-
West North Central Division, crude gypsum.....	..do.....	1,639	-	-		-	-
South Region:							
Crude gypsum, total.....	..do.....	2,064	(D)	(D)	2,179	(D)	(D)
Produced by mines classified in the Gypsum Industry.....	..do.....	402	(D)	(D)	451	(D)	(D)
Produced by mines included in establishments classified in manu- facturing industries <sup>1</sup> .....	..do.....	1,662	-	-	1,728	-	-
Crushed, ground, screened, or dried gypsum.....	..do.....	(NA)	1,032	5,230	(NA)	802	3,604
Oklahoma, crude gypsum.....	..do.....	557	(D)	(D)	493	(NA)	(NA)
Texas, crude gypsum.....	..do.....	1,004	-	-	1,187	(NA)	(NA)
West Region:							
Crude gypsum, total.....	..do.....	3,510	(D)	(D)	2,640	(D)	(D)
Produced by mines classified in the Gypsum Industry.....	..do.....	1,603	(D)	(D)	1,202	(D)	(D)
Produced by mines included in establishments classified in manu- facturing industries <sup>1</sup> .....	..do.....	1,907	-	-	1,438	-	-
Crushed, ground, screened, or dried gypsum.....	..do.....	(NA)	1,650	5,365	(NA)	1,167	3,543
New Mexico, crude gypsum.....	..do.....	220	(D)	(D)	(NA)	(NA)	(NA)
Nevada, crude gypsum.....	..do.....	854	-	-	(NA)	(NA)	(NA)
MICA							
United States:							
Hand-cobbed mica.....	1,000 pounds....	113,311	108	16	3,407	3,395	849
Sheet mica.....	..do.....				407	406	2,702
Scrap (or flake) mica.....	Short tons.....		242,393	21,320	106,326	48,478	989
Ground mica, total.....	..do.....	(NA)	124,117	7,549	(NA)	114,892	5,950
Mined and processed at establishments classified in the mineral industries.....	..do.....	87,076	86,630	4,319	71,831	71,385	2,332
Processed at establishments classified in the manufacturing indus- tries.....	..do.....	(NA)	37,487	3,230	(NA)	43,507	3,618

See footnotes at end of table.



TABLE 6A. Primary Products and Services of the Industries, by Geographic Areas:  
1963 and 1958—Continued

Product and geographic area	Unit of measure	1963			1958		
		Total production (quantity)	Total shipments (including interplant transfers)		Total production (quantity)	Total shipments (including interplant transfers)	
			Quantity	Value (\$1,000)		Quantity	Value (\$1,000)
MICA—Continued							
Northeast and North Central Regions:							
Hand-cobbed mica.....	1,000 pounds....	-	-	-	1,897	1,890	479
Sheet mica.....	do.....	-	-	-	137	137	892
Scrap (or flake) mica.....	Short tons.....	6,000	4,101	137	3,598	2,802	79
Ground mica.....	do.....	(NA)	8,548	507	(NA)	14,848	1,107
South Region:							
Hand-cobbed mica.....	1,000 pounds....	108	108	16	1,417	1,412	331
Sheet mica.....	do.....	92,871	226,978	2807	93,348	267	1,789
Scrap (or flake) mica.....	Short tons.....	(NA)	109,699	6,576	(NA)	44,398	875
Ground mica.....	do.....					86,228	4,318
North Carolina:							
Hand-cobbed mica.....	1,000 pounds....	(D)	(D)	(D)	1,346	1,341	316
Sheet mica.....	do.....	(D)	(D)	(D)	256	255	1,701
Scrap (or flake) mica.....	Short tons.....	58,109	220,950	2577	48,166	30,871	582
Ground mica.....	do.....	(NA)	64,175	3,855	(NA)	44,877	2,515
West Region:							
Hand-cobbed mica.....	1,000 pounds....	-	-	-	93	93	39
Sheet mica.....	do.....	-	-	-	2	2	21
Scrap (or flake) mica.....	Short tons.....	14,440	11,314	376	9,380	1,278	35
Ground mica.....	do.....	(NA)	5,870	466	(NA)	13,816	525
NATIVE ASPHALT AND BITUMENS							
United States:							
Gilsonite.....	1,000 short tons	(D)	(D)		317	321	4,700
Bituminous limestone and bituminous sandstone.....	do.....	1,314	1,317	8,799	1,298	1,298	3,327
PUMICE AND PUMICITE <sup>3</sup>							
United States.....	1,000 short tons	2,308	2,294	5,460	2,093	2,073	5,486
Mountain Division.....	do.....	1,305	1,329	42,641	1,170	1,143	2,579
New Mexico.....	do.....	306	306	875	492	482	1,032
Arizona.....	do.....	718	741	1,261	417	400	1,039
Pacific Division.....	do.....	981	943	2,653	830	825	2,430
Oregon.....	do.....	362	362	4573	(NA)	(NA)	(NA)
California.....	do.....	286	266	1,504	437	432	1,622
TALC, SOAPSTONE, AND PYROPHYLLITE							
United States:							
Crude:							
Mined and prepared at same establishment.....	do.....	594	(X)	(X)	490	(X)	(X)
Production and net shipments.....	do.....	873	2219	21,946	726	2237	21,574
Prepared (crushed, ground, or sawed, including flotation concentrates), total.....	do.....	(NA)	795	18,694	(NA)	600	17,593
Ore mined and processed at establishments classified in the mineral industries.....	do.....	601	601	14,868	453	456	12,908
Ore processed at establishments classified in the manufacturing industries.....	do.....	(NA)	194	3,826	(NA)	144	4,685
Northeast Region:							
Crude.....	do.....	380	28	224	286	-	-
Prepared.....	do.....	323	323	7,854	(NA)	274	7,936
South Region:							
Crude.....	do.....	278	285	2445	258	75	386
Prepared.....	do.....	(NA)	256	6,268	(NA)	188	5,810
North Carolina:							
Crude.....	do.....	107	43	189	127	33	143
Prepared.....	do.....	63	63	1,615	89	90	2,023
West Region:							
Crude.....	do.....	215	2130	21,488	182	2162	21,188
Prepared.....	do.....	(NA)	216	4,572	(NA)	138	3,847
California:							
Crude.....	do.....	146	292	21,218	116	294	2871
Prepared.....	do.....	(NA)	130	3,134	(NA)	110	2,974
NATURAL ABRASIVES, EXCEPT SAND							
United States.....	do.....	84	83	5,001	66	65	3,510
Middle Atlantic Division and North Central Region.....	do.....	78	78	4,630	59	(NA)	(NA)

See footnotes at end of table.

TABLE 6A. Primary Products and Services of the Industries, by Geographic Areas:  
1963 and 1958—Continued

Product and geographic area	Unit of measure	1963			1958		
		Total production (quantity)	Total shipments (including interplant transfers)		Total production (quantity)	Total shipments (including interplant transfers)	
			Quantity	Value (\$1,000)		Quantity	Value (\$1,000)
PEAT							
United States, total.....	1,000 short tons	566	549	7,374	366	365	4,253
Northeast Region.....	...do.....	84	84	744	62	62	600
North Central Region.....	...do.....	352	337	5,523	165	165	2,837
Michigan.....	...do.....	243	241	4,288	124	124	2,308
South Region.....	...do.....	49	48	420	46	45	276
West Region.....	...do.....	81	80	687	93	93	540
NONMETALLIC MINERALS, N.E.C.							
Asbestos, crude and prepared.....	...do.....	68	64	5,490	44	244	24,900
Diatomite, prepared.....	...do.....	554	554	27,952	458	452	20,114
Perlite <sup>6</sup> .....	...do.....	385	343	4,652	364	283	2,604
Other nonmetallic minerals <sup>7</sup> .....	...do.....	412	2391	26,146	206	211	3,731

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.

<sup>1</sup>Includes gypsum produced and used in the same establishment in manufacturing gypsum products.

<sup>2</sup>Represents net shipments, that is, gross shipments less minerals received from other establishments for preparation.

<sup>3</sup>For 1963, excludes federal, State, and local government operations. These do not appear to have been significant in previous census years.

<sup>4</sup>Represents value of shipments of establishments in the Pumice and Pumicite Industry.

<sup>5</sup>Includes crude diatomite produced for shipment without preparation, amounting to less than one percent of the total.

<sup>6</sup>Represents crude production and crude and prepared shipments. Includes simple preparation methods such as drying and crushing, and expansion if performed in conjunction with mining.

<sup>7</sup>Represents such minerals as vermiculite, graphite, gemstones, staurolite, and greensand.

TABLE 6B. **Product Classes—Indexes of Production and Unit Value for Primary Products Shipped by All Producers: 1963 and 1958**

Product code	Product and year	Indexes (1954 = 100)	
		Production	Unit value
149	Miscellaneous minerals, n.e.c.....1963..	129	120
	.....1958..	103	118
1492	Gypsum (net shipments of the Gypsum Industry).....1963..	135	108
	.....1958..	101	105
1493	Mica (net in mineral industries).....1963..	91	183
	.....1958..	117	123
1494	Native asphalt and bituminous.....1963..	138	99
	.....1958..	114	109
1495	Pumice and pumicite.....1963..	105	138
	.....1958..	95	153
1496	Talc, soapstone, and pyrophyllite (net shipments in the mineral industries).....1963..	131	111
	.....1958..	103	122
	Crude (gross production).....1963..	143	98
	.....1958..	119	73
	Prepared in the mineral industries.....1963..	127	112
	.....1958..	97	128
1497	Natural abrasives, except sand.....1963..	106	129
	.....1958..	84	116
1498	Peat.....1963..	227	144
	.....1958..	147	125
1499	Nonmetallic minerals, n.e.c. <sup>1</sup> .....1963..	131	121
	.....1958..	97	115
	Asbestos.....1963..	139	88
	.....1958..	90	114
	Diatomite.....1963..	120	126
	.....1958..	99	111

n.e.c. Not elsewhere classified.

<sup>1</sup>Adjusted to represent also other nonmetallic minerals, n.e.c., which are not shown separately below.

TABLE 6C. Shipments of Selected Primary Products Distributed by Value Per Ton: 1963

Product and average value per ton f.o.b. mine or plant <sup>1</sup>	Quantity shipped		Value of shipments		Product and average value per ton f.o.b. mine or plant <sup>1</sup>	Quantity shipped		Value of shipments	
	Short tons (1,000)	Percent of total quantity	Value (\$1,000)	Percent of total value		Short tons (1,000)	Percent of total quantity	Value (\$1,000)	Percent of total value
GYPSUM					TALC, SOAPSTONE, AND PYROPHYLLITE				
Crushed, ground, screened, or dried gypsum, total <sup>2</sup> .....	2,812	100.0	8,535	100.0	Crude gross shipments, total.....	265	100.0	2,208	100.0
Less than \$2.95.....	1,181	42.0	2,637	30.9	Less than \$3.79.....	17	6.4	56	2.5
\$2.95 to \$3.34.....	730	26.0	2,333	27.3	\$3.80 to \$5.44.....	94	35.5	393	17.8
\$3.35 to \$4.29.....	741	26.3	2,636	30.9	\$5.45 to \$7.84.....	41	15.5	278	12.6
\$4.30 to \$5.44.....	128	4.6	639	7.5	\$7.85 to \$12.49.....	83	31.3	877	39.7
\$5.45 and over.....	32	1.1	290	3.4	\$12.50 and over.....	30	11.3	604	27.4
MICA					Crushed, ground, or sawed, including flotation concentrates, total.....				
Scrap (or flake) mica, total.....	42	100.0	1,320	100.0	Less than \$11.11.....	100	16.6	642	4.3
Less than \$16.00.....	8	19.0	110	8.3	\$11.11 to \$14.10.....	50	8.3	644	4.4
\$16.00 to \$25.99.....	10	23.8	232	17.6	\$14.11 to \$17.90.....	105	17.5	1,653	11.1
\$26.00 to \$33.49.....	10	23.8	319	24.2	\$17.91 to \$25.90.....	157	26.1	3,394	22.8
\$33.50 to \$37.99.....	11	26.2	399	30.2	\$25.91 and over.....	189	31.5	8,535	57.4
\$38.00 and over.....	3	7.2	260	19.7	NATURAL ABRASIVES, EXCEPT SAND				
Ground mica, total <sup>2</sup> .....	87	100.0	4,319	100.0	Natural abrasives, except sand, total.....	83	100.0	5,001	100.0
\$20.50 to \$33.49.....	7	8.0	177	4.1	\$16.00 to \$22.99.....	11	13.2	224	4.5
\$33.50 to \$37.99.....	37	42.5	1,287	29.8	\$23.00 to \$61.49.....	56	67.5	2,178	43.5
\$38.00 to \$54.49.....	15	17.3	660	15.3	\$61.50 and over.....	16	19.3	2,599	52.0
\$54.50 to \$69.49.....	18	20.7	1,101	25.5	PEAT				
\$69.50 and over.....	10	11.5	1,094	25.3	Peat, total.....	549	100.0	7,374	100.0
PUMICE AND PUMICITE					Less than \$2.30.....	48	8.8	98	1.3
Pumice and pumicite, total.....	2,294	100.0	5,460	100.0	\$2.30 to \$3.34.....	7	1.3	23	0.3
Less than \$1.00.....	710	31.0	412	7.5	\$3.35 to \$4.84.....	48	8.8	223	3.0
\$1.00 to \$1.11.....	236	10.3	239	4.4	\$4.85 to \$6.14.....	54	9.8	293	4.0
\$1.12 to \$1.41.....	48	2.1	60	1.1	\$6.15 to \$6.94.....	26	4.7	173	2.3
\$1.42 to \$1.79.....	271	11.8	464	8.5	\$6.95 to \$7.84.....	11	2.0	84	1.1
\$1.80 to \$2.04.....	217	9.5	424	7.8	\$7.85 to \$9.99.....	86	15.7	789	10.7
\$2.05 to \$2.29.....	221	9.6	466	8.5	\$10.00 to \$11.10.....	15	2.7	161	2.2
\$2.30 to \$2.94.....	157	6.8	411	7.6	\$11.11 to \$14.10.....	65	11.8	842	11.4
\$2.95 to \$3.34.....	44	1.9	141	2.6	\$14.11 to \$20.40.....	114	20.8	2,105	28.6
\$3.35 to \$4.84.....	319	13.9	1,333	24.4	\$20.41 to \$33.40.....	10	1.8	256	3.5
\$4.85 to \$9.99.....	46	2.0	341	6.2	\$33.41 and over.....	65	11.8	2,327	31.6
\$10.00 and over.....	25	1.1	1,169	21.4					

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
<sup>1</sup>The "average values" are based on the entire shipments of the specified products by each establishment. Thus they are representative of varied average prices among establishments but not variations within an establishment.  
<sup>2</sup>Represents material prepared in the mineral industries only.

TABLE 7A. Supplies Used: 1963 and 1958

(Detailed figures for the quantity and cost of supplies used were not obtained for these industries. For the total cost of supplies used and the cost of minerals received for preparation see table 3. For the quantity and total cost of purchased fuels and electric energy used, see table 3.)

TABLE 7B Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954

Ind. code	Industry, subindustry, geographic area, and type of operation	Aggregate horsepower per production worker		1963 (1,000 hp.)									
				Aggregate horsepower (prime movers and electric motors driven by purchased energy)					Prime movers (horsepower)				
		1963	1954	Total	By type of equipment				Total	By type of equipment			
					Loading equipment	Transportation equipment		All other equipment		Loading equipment	Transportation equipment		All other equipment
Highway-type	Other	Highway-type	Other										
1481	Nonmetallic minerals services industry.....	86	63	69	23	25	11	10	65	22	25	9	9
149-	Miscellaneous nonmetallic minerals industries.....	68	25	312	47	70	38	157	182	39	70	33	40
1492	Gypsum industry:												
	United States.....	84	71	32	5	7	4	16	19	4	7	3	5
	Producing open-pit mines with preparation plants.....	106	(NA)	26	4	7	3	12	17	3	7	3	4
1493	Mica industry:												
	United States.....	74	(1)	25	7	5	1	12	17	7	5	1	4
	South.....	76	(1)	21	5	5	1	10	14	5	5	1	3
	Producing open-pit mines with preparation plants.....	78	(1)	23	6	5	1	11	15	6	5	1	3
1494	Native asphalt and bitumens industry.....	95	69	34	3	8	6	17	18	3	8	3	4
1495	Pumice and pumicite industry.....	117	115	26	7	8	3	8	21	6	8	3	4
1496	Talc, soapstone, and pyrophyllite industry:												
	United States.....	48	28	48	6	9	4	29	22	4	9	3	6
	Northeast.....	17	30	17	1	2	1	13	3	-	2	1	-
	South.....	21	22	21	4	5	1	11	12	3	5	1	3
	Underground mines with preparation plants...	13	(NA)	13	1	2	1	9	2	-	2	-	-
1497	Natural abrasives, except sand industry.....	79	56	17	1	5	3	8	13	1	5	3	4
1498	Peat industry:												
	United States.....	59	74	26	8	9	6	3	24	8	9	6	1
	East North Central.....	48	(NA)	11	4	3	3	1	10	4	3	3	(2)
1499	Nonmetallic minerals, n.e.c., industry:												
	United States, total.....	66	55	104	10	19	11	64	48	6	19	11	12
	Asbestos subindustry.....	63	43	25	3	3	3	16	10	1	3	3	3
	Diatomite subindustry.....	57	60	39	4	6	2	27	13	3	6	2	2
	Perlite subindustry.....	83	76	15	2	4	1	8	8	1	4	1	2
	Vermiculite and other non-metallic minerals, nec, subindustry.....	78	56	25	1	6	5	13	17	1	6	5	5
	Mountain.....	89	53	42	5	11	5	21	27	4	11	5	7
	Pacific.....	50	58	36	2	2	1	31	7	1	2	1	3
	Producing open-pit mines with preparation plants.....	63	(NA)	92	8	16	11	57	40	5	16	11	8
1963 (1,000 hp.)—Continued													
				Prime movers (horsepower)—Continued		Electric motors (horsepower)							
				By use		Total	By type of equipment			By source of energy			
				Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated at same establishment		
1481	Nonmetallic minerals services industry.....	1	64	5	1	2	2	4	1				
149-	Miscellaneous nonmetallic minerals industries.....	11	171	135	8	5	122	130	5				
1492	Gypsum industry:												
	United States.....	1	18	13	1	1	11	13	(2)				(2)
	Producing open-pit mines with preparation plants.....	1	16	9	1	(2)	8	9	(2)				(2)
1493	Mica industry:												
	United States.....	-	17	8	(2)	-	8	8	(2)				(2)
	South.....	-	14	7	(2)	-	7	7	(2)				(2)
	Producing open-pit mines with preparation plants.....	-	15	8	(2)	-	8	8	(2)				(2)
1494	Native asphalt and bitumens industry.....	-	18	16	-	3	13	16	-				-
1495	Pumice and pumicite industry.....	1	20	5	1	-	4	5	(2)				(2)
1496	Talc, soapstone, and pyrophyllite industry:												
	United States.....	1	21	26	2	1	23	26	(2)				(2)
	Northeast.....	-	3	14	1	(2)	13	14	-				-
	South.....	-	12	9	1	(2)	8	9	-				-
	Underground mines with preparation plants...	-	2	11	1	1	9	11	-				-

See footnotes at end of table.

TABLE 7B. Horsepower of Power Equipment Used, by Geographic Areas and Type of Operation: 1963 and 1954—Continued

Ind. code	Industry, subindustry, geographic area, and type of operation	1963 (1,000 hp.)--Continued							
		Prime movers (horsepower)-- Continued		Electric motors (horsepower)					
		By use		Total	By type of equipment			By source of energy	
		Driving generators	Not driving generators		Loading equipment	Transportation equipment	All other equipment	Driven by purchased energy	Driven by energy generated at same establishment
149-	Miscellaneous nonmetallic minerals industries--Con.								
1497	Natural abrasives, except sand industry.....	3	10	4	(Z)	(Z)	4	4	(Z)
1498	Peat industry:								
	United States.....	2	22	2	(Z)	(Z)	2	2	(Z)
	East North Central.....	1	9	1	(Z)	(Z)	1	1	-
1499	Nonmetallic minerals, n.e.c., industry:								
	United States, total.....	3	45	61	4	-	57	56	5
	Asbestos subindustry.....	2	8	15	2	-	13	15	-
	Diatomite subindustry.....	(Z)	13	29	1	-	28	26	3
	Perlite subindustry.....	-	8	9	1	-	8	7	2
	Vermiculite and other non-metallic minerals, nec, subindustry.....	1	16	8	-	-	8	8	-
	Mountain.....	1	26	15	1	-	14	15	-
	Pacific.....	2	5	29	1	-	28	29	-
	Producing open-pit mines with preparation plants.....	3	37	56	3	-	53	52	4

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
 (Z) Less than one-half of the unit of measure specified.

n.e.c. Not elsewhere classified.

<sup>1</sup>Not shown since the number of proprietors and firm members performing manual labor exceeded one-third of the number of production, development, and exploration workers.

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963

Item	Establishments, total	Establishments with average employment of--					
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees
1481.--NONMETALLIC MINERALS SERVICES							
Establishments.....number..	119	116	3	-	-	-	-
Reporting water use, total.....do...	92	89	3	-	-	-	-
By source of water:							
Utility.....do...	8	7	1	-	-	-	-
Other than utility.....do...	42	40	2	-	-	-	-
Source not specified.....do...	42	42	-	-	-	-	-
By quantity of water intake:							
Under 1 million gallons.....do...	86	83	3	-	-	-	-
1 to 9 million gallons.....do...	1	1	-	-	-	-	-
20 to 99 million gallons.....do...	1	1	-	-	-	-	-
100 million gallons and over.....do...	4	4	-	-	-	-	-
Employees.....do...	871	693	178	-	-	-	-
At establishments reporting water use.....do...	731	553	178	-	-	-	-
Value added in mining.....\$1,000..	9,326	6,832	2,494	-	-	-	-
Value added at establishments reporting water use.....do...	8,684	6,190	2,494	-	-	-	-
1492.--GYPSUM							
Establishments.....number..	37	35	2	-	-	-	-
Reporting water use, total.....do...	25	23	2	-	-	-	-
By source of water:							
Utility.....do...	7	7	-	-	-	-	-
Other than utility.....do...	12	11	1	-	-	-	-
Source not specified.....do...	6	5	1	-	-	-	-
By quantity of water intake:							
Under 1 million gallons.....do...	22	20	2	-	-	-	-
1 to 9 million gallons.....do...	1	1	-	-	-	-	-
20 to 99 million gallons.....do...	1	1	-	-	-	-	-
100 million gallons and over.....do...	1	1	-	-	-	-	-
Employees.....do...	458	458	(D)	-	-	-	-
At establishments reporting water use.....do...	424	424	(D)	-	-	-	-
Value added in mining.....\$1,000..	7,753	7,753	(D)	-	-	-	-
Value added at establishments reporting water use.....do...	7,446	7,446	(D)	-	-	-	-
1493.--MICA							
Establishments.....number..	34	32	2	-	-	-	-
Reporting water use, total.....do...	19	17	2	-	-	-	-
By source of water:							
Utility.....do...	3	2	1	-	-	-	-
Other than utility.....do...	12	11	1	-	-	-	-
Source not specified.....do...	4	4	-	-	-	-	-
By quantity of water intake:							
Under 1 million gallons.....do...	12	12	-	-	-	-	-
1 to 9 million gallons.....do...	3	3	-	-	-	-	-
20 to 99 million gallons.....do...	1	-	1	-	-	-	-
100 million gallons and over.....do...	3	2	1	-	-	-	-
Employees.....do...	398	398	(D)	-	-	-	-
At establishments reporting water use.....do...	353	353	(D)	-	-	-	-
Value added in mining.....\$1,000..	3,925	3,925	(D)	-	-	-	-
Value added at establishments reporting water use.....do...	3,612	3,612	(D)	-	-	-	-
1494.--NATIVE ASPHALT AND BITUMENS							
Establishments.....number..	13	10	2	1	-	-	-
Reporting water use, total.....do...	10	7	2	1	-	-	-
By source of water:							
Other than utility.....do...	8	5	2	1	-	-	-
Source not specified.....do...	2	2	-	-	-	-	-
By quantity of water intake:							
Under 1 million gallons.....do...	8	7	1	-	-	-	-
10 to 19 million gallons.....do...	1	-	1	-	-	-	-
100 million gallons and over.....do...	1	-	-	1	-	-	-
Employees.....do...	422	104	318	(D)	-	-	-
At establishments reporting water use.....do...	412	94	318	(D)	-	-	-
Value added in mining.....\$1,000..	6,333	1,021	5,312	(D)	-	-	-
Value added at establishments reporting water use.....do...	6,289	977	5,312	(D)	-	-	-

TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963—Continued

Item	Establishments, total	Establishments with average employment of—					
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees
1495.--PUMICE AND PUMICITE							
Establishments.....number..	85	85	-	-	-	-	-
Reporting water use, total.....do....	40	40	-	-	-	-	-
By source of water:							
Utility.....do....	4	4	-	-	-	-	-
Other than utility.....do....	33	33	-	-	-	-	-
Source not specified.....do....	3	3	-	-	-	-	-
By quantity of water intake:							
Under 1 million gallons.....do....	40	40	-	-	-	-	-
Employees.....do....	247	247	-	-	-	-	-
At establishments reporting water use.....do....	229	175	-	-	-	-	-
Value added in mining.....\$1,000..	4,198	4,198	-	-	-	-	-
Value added at establishments reporting water use.....do....	3,063	3,063	-	-	-	-	-
1496.--TALC, SOAPSTONE, AND PYROPHYLLITE							
Establishments.....number..	65	58	4	2	1	-	-
Reporting water use, total.....do....	48	41	4	2	1	-	-
By source of water:							
Utility.....do....	5	5	-	-	-	-	-
Other than utility.....do....	38	33	3	2	-	-	-
Source not specified.....do....	5	3	1	-	1	-	-
By quantity of water intake:							
Under 1 million gallons.....do....	38	36	1	1	-	-	-
1 to 9 million gallons.....do....	4	1	3	-	-	-	-
10 to 19 million gallons.....do....	1	-	-	-	1	-	-
20 to 99 million gallons.....do....	2	2	-	-	-	-	-
100 million gallons and over.....do....	3	2	-	1	-	-	-
Employees.....do....	11,276	346	244	657	(D)	-	-
At establishments reporting water use.....do....	1,213	312	244	657	(D)	-	-
Value added in mining.....\$1,000..	13,746	4,363	2,213	7,170	(D)	-	-
Value added at establishments reporting water use.....do....	13,409	4,026	2,213	7,170	(D)	-	-
1497.--NATURAL ABRASIVES, EXCEPT SAND							
Establishments.....number..	23	22	-	1	-	-	-
Reporting water use, total.....do....	14	13	-	1	-	-	-
By source of water:							
Utility.....do....	3	3	-	-	-	-	-
Other than utility.....do....	11	10	-	1	-	-	-
By quantity of water intake:							
Under 1 million gallons.....do....	13	13	-	-	-	-	-
Employees.....do....	294	294	-	(D)	-	-	-
At establishments reporting water use.....do....	249	249	-	(D)	-	-	-
Value added in mining.....\$1,000..	4,125	4,125	-	(D)	-	-	-
Value added at establishments reporting water use.....do....	3,927	3,927	-	(D)	-	-	-
1498.--PEAT							
Establishments.....number..	109	107	2	-	-	-	-
Reporting water use, total.....do....	26	24	2	-	-	-	-
By source of water:							
Utility.....do....	6	6	-	-	-	-	-
Other than utility.....do....	7	6	1	-	-	-	-
Source not specified.....do....	13	12	1	-	-	-	-
By quantity of water intake:							
Under 1 million gallons.....do....	25	23	2	-	-	-	-
1 to 9 million gallons.....do....	1	1	-	-	-	-	-
Employees.....do....	504	504	(D)	-	-	-	-
At establishments reporting water use.....do....	328	328	(D)	-	-	-	-
Value added in mining.....\$1,000..	5,626	5,626	(D)	-	-	-	-
Value added at establishments reporting water use.....do....	4,187	4,187	(D)	-	-	-	-

See footnotes at end of table.



TABLE 7C. Water Use in the Industries, by Employment Size of Establishment: 1963—Continued

Item	Establishments, total	Establishments with average employment of—					
		0 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees
1499.--NONMETALLIC, MINERALS, N.E.C.							
Establishments.....number..	87	80	2	4	-	1	-
Reporting water use, total.....do....	38	31	2	4	-	1	-
By source of water:							
Utility.....do....	8	7	-	-	-	1	-
Other than utility.....do....	18	14	2	2	-	-	-
Source not specified.....do....	12	10	-	2	-	-	-
By quantity of water intake:							
Under 1 million gallons.....do....	26	25	1	-	-	-	-
1 to 9 million gallons.....do....	4	2	-	2	-	-	-
10 to 19 million gallons.....do....	-	-	-	-	-	-	-
20 to 99 million gallons.....do....	3	2	1	-	-	-	-
100 million gallons and over.....do....	5	2	-	2	-	1	-
Employees.....do....	1,878	765	(D)	1,113	-	(D)	-
At establishments reporting water use.....do....	1,713	605	(D)	1,108	-	(D)	-
Value added in mining.....\$1,000..	32,619	10,663	(D)	21,956	-	(D)	-
Value added at establishments reporting water use.....do....	31,609	9,653	(D)	21,956	-	(D)	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosure. Data for this item are included in the underscored figures at the left.  
 (NA) Not available. (X) Not applicable. n.e.c. Not elsewhere classified.

<sup>1</sup>Includes data for separately reported central offices and related facilities which were not distributed by size of establishment.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963

Type of operation and tons per man-hour <sup>1</sup>	Establishments (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expendi- tures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
1492.—GYPSUM									
All establishments, total.....	37	458	2,406	383	807	1,913	7,753	10,160	1,279
Less than 0.80.....	3	113	435	100	216	386	805	1,428	487
0.90 to 0.99.....	1								
1.00 to 1.59.....	3								
2.00 to 2.79.....	6	169	887	145	280	713	2,681	3,076	399
3.60 to 3.99.....	2								
4.00 to 4.99.....	2								
5.00 to 5.99.....	2	87	510	77	164	441	2,392	2,947	207
7.00 to 7.99.....	2								
8.00 to 8.99.....	2								
9.00 to 9.99.....	1	43	267	26	67	141	1,286	1,398	93
10.00 to 11.99.....	1								
Undistributed <sup>2</sup> .....	12								
46		307		35	80	232	589	1,311	93
Producing open-pit mines with preparation plants.....	21	302	1,589	246	540	1,241	5,010	6,768	907
Less than 0.80.....	2	110	420	97	208	378	854	1,467	491
0.90 to 0.99.....	1								
1.20 to 1.39.....	2								
2.00 to 2.39.....	1	152	879	119	262	645	3,644	4,364	338
2.40 to 2.79.....	2								
4.00 to 4.99.....	1								
5.00 to 5.99.....	2	40	290	30	70	218	512	937	78
7.00 to 7.99.....	2								
8.00 to 11.99.....	3								
Undistributed <sup>2</sup> .....	5								
1493.—MICA									
All establishments, total.....	34	398	1,582	357	733	1,299	3,925	5,560	860
Less than 0.19.....	8	207	863	183	398	701	1,805	2,866	442
0.20 to 0.29.....	4	26	114	21	42	95	251	352	46
0.30 to 0.49.....	3	34	135	32	50	121	392	608	20
1.00 to 1.19.....	1								
Undistributed <sup>2</sup> .....	18								
131		470		121	243	382	1,477	1,734	352
1494.—NATIVE ASPHALT AND BITUMENS									
All establishments, total.....	13	422	2,241	357	728	1,723	6,333	8,509	1,081
Less than 0.29.....	4	53	343	52	105	339	407	426	73
0.50 to 0.69.....	3	16	65	16	31	65	117	130	2
1.40 to 1.49.....	1								
2.80 to 4.99.....	3								
Undistributed <sup>2</sup> .....	2	353	1,833	289	592	1,319	5,809	7,953	1,006
1495.—PUMICE AND PUMICITE									
All establishments, total.....	85	247	1,056	222	428	981	4,198	5,358	682
Less than 0.40.....	7	69	268	61	118	250	934	1,150	188
0.60 to 0.99.....	5	27	75	24	42	66	272	290	50
1.00 to 1.99.....	5	21	64	18	35	56	101	236	31
2.40 to 2.79.....	2								
3.20 to 3.99.....	5								
4.00 to 4.99.....	3	37	183	34	71	177	451	598	80
5.00 to 6.99.....	4	15	63	14	24	59	246	260	140
7.00 to 8.99.....	6	21	88	21	41	88	269	347	59
10.00 to 14.99.....	4	6	21	6	11	21	95	187	13
20.00 and over.....	4	14	119	14	27	119	942	1,060	20
Undistributed <sup>2</sup> .....	40	37	175	30	59	145	888	1,230	101
Producing open-pit mines with preparation plants, total.....	51	199	868	174	341	793	2,813	3,692	588
Less than 0.40.....	6	86	322	75	144	293	1,183	1,412	238
0.60 to 0.99.....	3								
1.00 to 1.69.....	3								
2.40 to 2.79.....	2	31	133	26	56	121	265	452	52
3.20 to 3.99.....	2	30	140	28	56	134	441	521	150
4.00 to 4.99.....	3								
5.00 to 6.99.....	3								
7.00 to 8.99.....	4	20	109	20	36	109	347	487	75
10.00 to 14.99.....	2								
20.00 and over.....	1								
Undistributed <sup>2</sup> .....	22	32	164	25	49	136	577	820	73

See footnotes at end of table.

TABLE 8. General Statistics for Establishments Classified by Output per Man-Hour, by Selected Types of Operation: 1963—Continued

Type of operation and tons per man-hour <sup>1</sup>	Establishments	All employees		Production, development, and exploration workers			Value added in mining	Value of shipments and receipts	Capital expendi- tures
		Total	Payroll	Total	Man-hours	Wages			
	(number)	(number)	(\$1,000)	(number)	(1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)
1496.—TALC, SOAPSTONE, AND PYROPHYLLITE									
All establishments, total.....	65	1,276	6,627	1,054	2,229	5,390	13,746	17,534	1,148
Less than 0.20.....	4	408	1,384	354	705	1,300	2,884	3,356	125
0.20 to 0.39.....	10	419	2,330	339	770	1,969	3,553	4,756	283
0.40 to 0.59.....	7	194	1,353	185	410	1,275	3,981	5,016	247
0.60 to 0.99.....	7	52	250	49	101	229	622	699	123
1.00 to 1.99.....	5	56	324	46	94	221	1,002	1,226	123
2.00 to 3.00.....	4	17	73	11	23	44	268	313	7
Undistributed <sup>2</sup> .....	28	130	913	70	126	352	1,436	2,168	240
1497.—NATURAL ABRASIVES, EXCEPT SAND									
All establishments, total.....	23	294	1,583	216	466	1,048	4,125	5,002	498
Less than 0.09.....	3	200	1,132	172	373	895	3,376	4,070	431
0.20 to 0.29.....	1								
0.30 to 0.39.....	2								
0.40 to 0.49.....	1								
0.50 to 0.59.....	1								
Undistributed <sup>2</sup> .....	15	94	451	44	93	153	749	932	67
1498.—PEAT									
All establishments, total.....	109	504	1,778	442	948	1,473	5,626	7,360	870
Less than 0.20.....	10	76	349	66	137	222	470	577	131
0.20 to 0.29.....	7	53	183	43	88	151	261	348	42
0.30 to 0.49.....	9	33	98	32	73	97	281	332	102
0.50 to 0.59.....	6	38	124	33	75	104	219	351	41
0.60 to 0.69.....	5	77	280	73	180	268	1,381	1,851	83
0.70 to 0.79.....	5	87	281	75	128	223	757	1,158	173
1.00 to 1.39.....	7	24	82	21	42	76	218	249	69
1.80 to 3.59.....	5	21	64	10	21	39	130	149	17
Undistributed <sup>2</sup> .....	55	95	317	89	204	293	1,909	2,345	212
Producing open-pit mines with preparation plants, total.....	43	307	1,190	254	510	906	3,393	4,445	471
Less than 0.20.....	3	89	439	71	139	282	493	651	117
0.20 to 0.29.....	4								
0.40 to 0.49.....	2								
0.50 to 0.59.....	3								
0.60 to 0.79.....	5								
1.00 to 3.59.....	5	88	287	76	130	229	776	1,181	183
Undistributed <sup>2</sup> .....	21	25	86	13	26	60	183	208	13
		71	256	65	150	232	1,641	2,048	96

<sup>1</sup>Represents tons of primary products of the industry shipped per man-hour worked by production, development, and exploration workers.

<sup>2</sup>Represents establishments with no shipments or no production, development, or exploration worker man-hours, or with cost of contract work amounting to 30 percent or more of production, development, and exploration worker wages, or with number of working proprietors amounting to 30 percent or more of number of production, development, and exploration workers, or with man-hours spent on development and exploration work amounting to 30 percent or more of total man-hours reported.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963

Division and ratio of payroll to value added in mining	Establishment (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
1481.—NONMETALLIC MINERALS SERVICES									
United States, total.....	119	871	4,581	806	1,575	4,209	9,326	13,246	1,434
Less than 0.10.....	4	6	21	6	12	21	269	283	61
0.10 to 0.19.....	12	31	97	30	51	94	666	700	105
0.20 to 0.29.....	11	44	161	40	89	151	623	829	121
0.30 to 0.39.....	25	110	254	106	194	250	728	938	257
0.40 to 0.49.....	15	199	1,238	185	370	1,107	2,732	3,976	258
0.50 to 0.59.....	17	94	552	87	189	436	1,005	1,681	183
0.60 to 0.69.....	11	205	1,446	192	370	1,407	2,334	3,407	337
0.70 to 0.79.....	5	41	147	40	64	130	199	248	-
0.80 to 0.89.....	8	133	641	113	224	591	742	1,089	36
0.90 to 0.99.....	1								
1.00 and up.....	3								
Undistributed <sup>2</sup> .....	7	7	21	6	10	19	10	73	72
		1	3	1	2	3	18	22	4
1492.—GYPSUM									
United States, total.....	37	458	2,406	383	807	1,913	7,753	10,160	1,279
Less than 0.20.....	5	65	400	60	129	367	2,428	2,858	223
0.20 to 0.29.....	7	143	714	115	230	511	2,844	2,922	600
0.30 to 0.39.....	6	78	417	67	145	352	1,214	1,422	190
0.40 to 0.59.....	4	52	366	44	97	309	715	1,165	99
0.60 to 0.69.....	4	24	127	16	33	70	201	324	26
0.70 and over.....	5	87	337	78	169	300	292	1,119	123
Undistributed <sup>2</sup> .....	6	9	45	3	4	4	59	350	18
1493.—MICA									
United States, total.....	34	398	1,582	357	733	1,299	3,925	5,560	860
Less than 0.30.....	8	23	74	17	32	62	294	301	72
0.30 to 0.39.....	7	141	596	123	282	450	1,783	2,178	415
0.40 to 0.49.....	7	109	380	106	182	341	895	1,553	166
0.50 and over.....	7	105	448	92	197	366	617	1,128	178
Undistributed <sup>2</sup> .....	5	20	84	19	40	80	336	400	29
1494.—NATIVE ASPHALT AND BITUMENS									
United States, total.....	13	422	2,241	357	728	1,723	6,333	8,509	1,081
0.10 to 0.49.....	6	346	1,696	291	596	1,324	5,821	7,965	1,006
0.50 to 0.59.....	3	14	60	14	27	60	105	118	2
0.60 and over.....	4	62	485	52	105	339	407	426	73
1495.—PUMICE AND PUMICITE									
United States, total.....	85	247	1,056	222	428	981	4,198	5,358	682
Less than 0.10.....	6	10	38	10	19	38	959	1,048	18
0.10 to 0.19.....	4	9	24	9	15	24	197	223	30
0.20 to 0.29.....	12	80	339	72	138	307	1,396	1,635	296
0.30 to 0.39.....	15	59	267	50	102	243	768	1,028	103
0.40 to 0.49.....	8	45	200	41	80	193	456	711	126
0.50 to 0.59.....	6	11	21	11	19	21	40	56	2
0.60 to 0.99.....	4	15	101	13	29	94	122	172	7
1.00 and over.....	5	9	34	9	14	34	30	40	40
Undistributed <sup>2</sup> .....	25	9	32	7	12	27	230	445	60
Pacific, total.....	45	125	566	114	226	516	2,096	2,611	372
Less than 0.19.....	4	8	14	8	14	14	168	201	31
0.20 to 0.29.....	4	43	207	40	80	189	860	990	141
0.30 to 0.39.....	8	30	140	26	54	118	390	524	64
0.40 to 0.49.....	5	30	149	27	55	144	339	457	82
0.50 and over.....	5	14	56	13	23	51	66	76	5
Undistributed <sup>2</sup> .....	19	-	-	-	-	-	273	363	49
1496.—TALC, SOAPSTONE, AND PYROPHYLLITE									
United States, total.....	65	1,276	6,627	1,054	2,229	5,390	13,746	17,534	1,148
Less than 0.19.....	5	28	153	20	39	92	918	1,238	52
0.20 to 0.29.....	5	152	1,100	137	322	993	3,719	4,466	196
0.30 to 0.39.....	15	133	661	112	227	514	1,930	2,223	243
0.40 to 0.49.....	5	53	278	51	105	263	649	817	104
0.50 to 0.59.....	7	530	1,926	467	954	1,745	3,580	4,645	139
0.60 to 0.69.....	4	57	259	44	87	179	383	649	12
0.70 to 0.79.....	5	231	1,526	167	389	1,301	2,025	2,582	183
0.80 to 0.99.....	3	44	240	40	73	222	282	684	42
1.00 and over.....	4	19	89	16	33	81	45	50	92
Undistributed <sup>2</sup> .....	12	29	395	-	-	-	215	180	85

See footnotes at end of table.

TABLE 9. General Statistics for Establishments Classified by Ratio of Payroll to Value Added in Mining: 1963—Continued

Division and ratio of payroll to value added in mining	Establishment (number)	All employees		Production, development, and exploration workers			Value added in mining (\$1,000)	Value of shipments and receipts (\$1,000)	Capital expenditures (\$1,000)
		Total (number)	Payroll (\$1,000)	Total (number)	Man-hours (1,000)	Wages (\$1,000)			
1497.—NATURAL ABRASIVES, EXCEPT SAND									
United States, total.....	23	294	1,583	216	466	1,048	4,125	5,002	498
Less than 0.30.....	9	83	396	71	149	313	2,116	2,537	55
0.30 to 0.49.....	5	163	838	128	264	621	1,998	2,335	396
0.70 to 0.79.....	1								
1.00 and over.....	1								
Undistributed <sup>2</sup> .....	7	48	349	17	53	114	11	130	47
1498.—PEAT									
United States, total.....	109	504	1,778	442	948	1,473	5,626	7,360	870
Less than 0.10.....	3	309	974	288	621	890	4,448	5,776	436
0.10 to 0.19.....	10								
0.20 to 0.29.....	10								
0.30 to 0.39.....	23								
0.40 to 0.49.....	7	17	35	17	39	35	83	103	47
0.50 to 0.59.....	6	23	80	17	33	64	152	174	26
0.60 to 0.69.....	5	37	167	20	47	106	255	332	136
0.70 to 0.79.....	4	31	101	23	41	76	138	152	48
0.80 to 0.99.....	4	23	88	21	45	81	103	144	18
1.00 and over.....	5	55	278	49	107	178	236	429	74
Undistributed <sup>2</sup> .....	32	9	55	7	15	43	211	250	85
East North Central, total.....	43	255	850	231	487	754	3,683	5,009	333
Less than 0.20.....	6	205	681	189	398	604	3,503	4,654	197
0.20 to 0.29.....	5								
0.30 to 0.39.....	6								
0.40 to 0.59.....	5								
0.60 and over.....	7	12	27	9	17	27	55	67	29
Undistributed <sup>2</sup> .....	14	31	95	28	62	88	98	234	62
		7	47	5	10	35	27	54	45
1499.—NONMETALLIC MINERALS, N.E.C.									
United States, total.....	87	1,878	11,201	1,578	3,326	8,961	32,623	42,963	5,511
0.10 to 0.19.....	6	55	241	51	107	210	1,454	1,638	96
0.20 to 0.29.....	24	720	4,685	567	1,182	3,508	20,358	23,533	2,585
0.30 to 0.39.....	14	395	2,170	341	725	1,760	6,403	7,984	788
0.40 to 0.49.....	2	229	1,331	211	462	1,183	2,575	3,517	547
0.50 to 0.59.....	5								
0.60 to 0.69.....	1								
0.70 to 0.79.....	2								
0.80 to 0.89.....	3	238	1,525	209	450	1,291	1,857	4,376	1,019
0.90 to 0.99.....	2								
1.00 and over.....	10	75	354	62	133	239	231	953	85
Undistributed <sup>2</sup> .....	18	166	895	137	267	770	( <sup>3</sup> )	962	391

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.

<sup>1</sup>In computing these ratios contract or subcontract employment serving the establishment is excluded. The cost of contract or subcontract work expressed as a percent of payroll for 1963 was: for Nonmetallic minerals services, 21 percent; for Gypsum, 19 percent; for Mica, 11 percent; for Native asphalt and bitumens, 46 percent; for Pumice and pumicite, 25 percent; for Talc, soapstone, pyrophyllite, 5 percent; for Natural abrasives, except sand, 6 percent; for Peat, 20 percent; and for Nonmetallic minerals, n.e.c., 23 percent.

<sup>2</sup>Represents establishments with zero or negative value added; establishments with no employees; and for number of employees and payroll, includes figures for separately reported central offices and related facilities.

<sup>3</sup>Not shown since cost of supplies, fuels, purchased electric energy, contract work, and purchased machinery exceeds value of shipments and receipts plus capital expenditures.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963

Value added per employee class <sup>1</sup>	Number of employees	Number of establishments with average employment of--							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
1481.—NONMETALLIC MINERALS SERVICES									
Total.....	871	119	108	8	3	-	-	-	-
Less than \$3,000.....	75	15	15	-	-	-	-	-	-
\$3,000 to \$3,999.....	41	8	8	-	-	-	-	-	-
\$4,000 to \$4,999.....	33	4	3	1	-	-	-	-	-
\$5,000 to \$5,999.....	118	12	10	1	1	-	-	-	-
\$6,000 to \$6,999.....	55	5	4	1	-	-	-	-	-
\$7,000 to \$7,999.....	51	5	4	1	-	-	-	-	-
\$8,000 to \$8,999.....	68	9	9	-	-	-	-	-	-
\$9,000 to \$9,999.....	52	6	5	1	-	-	-	-	-
\$10,000 to \$12,499.....	45	12	12	-	-	-	-	-	-
\$12,500 to \$14,999.....	129	7	5	1	1	-	-	-	-
\$15,000 to \$17,499.....	177	12	9	2	1	-	-	-	-
\$17,500 to \$19,999.....	25	6	6	-	-	-	-	-	-
\$20,000 and over.....	2	12	12	-	-	-	-	-	-
Undistributed <sup>2</sup> .....	-	6	6	-	-	-	-	-	-
1492.—GYPSUM									
Total.....	458	37	31	4	2	-	-	-	-
Less than \$4,000.....	79	4	3	-	1	-	-	-	-
\$4,000 to \$6,999.....	22	5	5	-	-	-	-	-	-
\$7,000 to \$8,999.....	22	3	3	-	-	-	-	-	-
\$9,000 to \$12,499.....	27	4	4	-	-	-	-	-	-
\$12,500 to \$17,499.....	67	6	5	1	-	-	-	-	-
\$17,500 to \$19,999.....	145	4	2	1	1	-	-	-	-
\$20,000 and over.....	96	6	4	2	-	-	-	-	-
Undistributed <sup>2</sup> .....		5	5	-	-	-	-	-	-
1493.—MICA									
Total.....	398	34	28	4	2	-	-	-	-
Less than \$3,000.....	20	4	4	-	-	-	-	-	-
\$3,000 to \$5,999.....	38	6	5	1	-	-	-	-	-
\$6,000 to \$7,999.....	19	3	3	-	-	-	-	-	-
\$8,000 to \$9,999.....	110	4	2	1	1	-	-	-	-
\$10,000 to \$12,499.....	107	4	2	1	1	-	-	-	-
\$12,500 to \$14,999.....	35	3	3	-	-	-	-	-	-
\$15,000 to \$19,999.....	8	3	3	-	-	-	-	-	-
\$20,000 and over.....	61	2	1	1	-	-	-	-	-
Undistributed <sup>2</sup> .....		5	5	-	-	-	-	-	-
1494.—NATIVE ASPHALT AND BITUMENS									
Total.....	422	13	9	1	2	1	-	-	-
\$3,000 to \$6,999.....	37	4	3	1	-	-	-	-	-
\$7,000 to \$12,499.....	<sup>3</sup> 121	5	4	-	1	-	-	-	-
\$15,000 and over.....	<sup>2</sup> 264	4	2	-	1	1	-	-	-
1495.—PUMICE AND PUMICITE									
Total.....	247	85	84	1	-	-	-	-	-
Less than \$3,000.....	15	6	6	-	-	-	-	-	-
\$4,000 to \$5,999.....	33	10	10	-	-	-	-	-	-
\$7,000 to \$8,999.....	11	3	3	-	-	-	-	-	-
\$9,000 to \$9,999.....	22	4	4	-	-	-	-	-	-
\$10,000 to \$12,499.....	25	8	8	-	-	-	-	-	-
\$12,500 to \$14,999.....	47	10	10	-	-	-	-	-	-
\$15,000 to \$17,499.....	22	4	4	-	-	-	-	-	-
\$17,500 to \$19,999.....	13	5	5	-	-	-	-	-	-
\$20,000 and over.....	59	10	9	1	-	-	-	-	-
Undistributed <sup>2</sup> .....		25	25	-	-	-	-	-	-
1496.—TALC, SOAPSTONE, AND PYROPHYLLITE									
Total.....	1,276	65	56	2	4	2	1	-	-
Less than \$3,000.....	14	3	3	-	-	-	-	-	-
\$3,000 to \$4,999.....	18	3	3	-	-	-	-	-	-
\$5,000 to \$6,999.....	502	11	8	1	1	-	1	-	-
\$7,000 to \$8,999.....	107	7	6	-	1	-	-	-	-
\$9,000 to \$12,499.....	343	9	5	1	2	1	-	-	-
\$12,500 to \$14,999.....	77	10	10	-	-	-	-	-	-
\$17,500 and over.....	186	10	9	-	-	1	-	-	-
Undistributed <sup>2</sup> .....	29	12	12	-	-	-	-	-	-

See footnotes at end of table.

TABLE 10. Value Added in Mining Per Employee, by Size of Establishment: 1963—Continued

Value added per employee class <sup>1</sup>	Number of employees	Number of establishments with average employment of--							
		Total	0 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
1497.—NATURAL ABRASIVES, EXCEPT SAND									
Total.....	294	23	18	4	-	1	-	-	-
Less than \$3,000.....	39	{	2	1	-	-	-	-	-
\$7,000 to \$7,999.....			1	1	-	-	-	-	-
\$9,000 to \$14,999.....	134	{	6	5	-	1	-	-	-
\$15,000 to \$19,999.....			44	5	4	1	-	-	-
\$20,000 and over.....	77	{	2	1	-	-	-	-	-
Undistributed <sup>2</sup> .....			7	6	1	-	-	-	-
1498.—PEAT									
Total.....	504	109	105	2	2	-	-	-	-
Less than \$3,000.....	28	7	7	-	-	-	-	-	-
\$3,000 to \$3,999.....	10	4	4	-	-	-	-	-	-
\$4,000 to \$4,999.....	100	14	14	-	-	-	-	-	-
\$5,000 to \$5,999.....	49	5	4	1	-	-	-	-	-
\$6,000 to \$6,999.....	19	8	8	-	-	-	-	-	-
\$7,000 to \$7,999.....	55	5	4	1	-	-	-	-	-
\$8,000 to \$8,999.....	22	4	4	-	-	-	-	-	-
\$9,000 to \$9,999.....	30	8	8	-	-	-	-	-	-
\$10,000 to \$12,499.....	33	8	8	-	-	-	-	-	-
\$12,500 to \$14,999.....	31	6	6	-	-	-	-	-	-
\$15,000 to \$19,999.....	11	5	5	-	-	-	-	-	-
\$20,000 and over.....	108	4	2	-	2	-	-	-	-
Undistributed <sup>2</sup> .....	8	31	31	-	-	-	-	-	-
1499.—MISCELLANEOUS NONMETALLIC MINERALS, N.E.C.									
Total.....	1,878	87	69	11	2	4	-	1	-
Less than \$3,000.....	46	11	11	-	-	-	-	-	-
\$3,000 to \$3,999.....	10	3	3	-	-	-	-	-	-
\$4,000 to \$4,999.....	85	{	2	2	-	-	-	-	-
\$5,000 to \$5,999.....			1	1	-	-	-	-	-
\$6,000 to \$6,999.....	10	4	4	-	-	-	-	-	-
\$7,000 to \$7,999.....	22	6	6	-	-	-	-	-	-
\$8,000 to \$8,999.....	224	7	4	2	-	1	-	-	-
\$9,000 to \$9,999.....	37	4	3	1	-	-	-	-	-
\$10,000 to \$12,499.....	238	7	5	-	1	1	-	-	-
\$12,500 to \$14,999.....	16	3	3	-	-	-	-	-	-
\$15,000 to \$17,499.....	279	3	3	-	1	1	-	-	-
\$17,500 to \$19,999.....	55	6	5	1	-	-	-	-	-
\$20,000 and over.....	690	11	6	4	-	-	-	1	-
Undistributed <sup>2</sup> .....	166	17	15	1	-	1	-	-	-

Standard Notes: - Represents zero.  
n.e.c. Not elsewhere classified.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

<sup>1</sup>See table 9, footnote 1.

<sup>2</sup>Represents establishments with no employees or with negative value added in mining and, for number of employees, figures for separately reported central offices and related facilities.

<sup>3</sup>Includes figures for separately reported central offices and related facilities.

TABLE 11. Hourly Earnings of Production, Development, and Exploration Workers for Establishments with 10 or More Employees, by Geographic Divisions: 1963

Hourly earnings classes	Number of employees <sup>1</sup>	Number of establishments with 10 or more employees in—									
		Total	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
1481.—NONMETALLIC MINERALS SERVICES											
Total.....	572	22	-	-	1	3	4	4	1	5	4
Less than \$1.00.....	42	{	1	-	-	-	-	1	-	-	-
\$1.00 to \$1.49.....			2	-	-	-	-	1	-	-	-
\$1.50 to \$1.99.....	43	{	3	-	-	1	-	-	-	-	-
\$2.00 to \$2.49.....			6	-	-	-	2	1	-	1	-
\$2.50 to \$2.99.....	175	{	4	-	-	-	1	-	-	1	2
\$3.00 to \$3.49.....			2	-	-	-	-	1	-	-	1
\$3.50 to \$3.99.....	185	{	3	-	-	-	-	-	-	2	1
\$4.50 and over.....			1	-	-	-	-	-	-	-	1
1492.—GYPSUM											
Total.....	344	12	-	2	3	-	-	-	3	2	2
\$1.50 to \$1.99.....	103	3	-	-	-	-	-	-	2	-	1
\$2.00 to \$2.99.....	153	5	-	1	1	-	-	-	1	1	1
\$3.00 to \$3.99.....	88	4	-	1	2	-	-	-	-	1	-
1493.—MICA											
Total.....	354	14	-	-	-	-	10	2	-	2	-
Less than \$1.49.....	66	4	-	-	-	-	2	1	-	1	-
\$1.50 to \$1.99.....	156	3	-	-	-	-	2	1	-	-	-
\$2.00 to \$2.49.....	132	{	6	-	-	-	5	-	-	1	-
\$4.00 to \$4.49.....			1	-	-	-	-	1	-	-	-
1494.—NATIVE ASPHALT AND BITUMENS											
Total.....	(D)	6	-	-	-	-	-	1	2	3	-
\$1.50 to \$2.49.....	257	3	-	-	-	-	-	1	1	1	-
\$2.50 to \$3.99.....	(D)	3	-	-	-	-	-	-	1	2	-
1495.—PUMICE AND PUMICITE											
Total.....	94	6	-	-	-	-	-	-	1	2	3
\$1.00 to \$1.49.....	(D)	1	-	-	-	-	-	-	1	-	-
\$1.50 to \$1.99.....	(D)	1	-	-	-	-	-	-	-	1	-
\$2.00 to \$2.49.....	55	3	-	-	-	-	-	-	-	1	2
\$2.50 to \$2.99.....	(D)	1	-	-	-	-	-	-	-	-	1
1496.—TALC, SOAPSTONE, AND PYROPHYLLITE											
Total.....	1,146	22	3	2	-	-	7	1	2	2	5
\$1.00 to \$1.49.....	(D)	2	-	-	-	-	2	-	-	-	-
\$1.50 to \$1.99.....	521	7	1	-	-	-	4	-	1	1	-
\$2.00 to \$2.49.....	151	7	2	-	-	-	1	1	-	1	2
\$2.50 to \$2.99.....	(D)	2	-	-	-	-	-	-	1	-	1
\$3.00 to \$3.49.....	(D)	2	-	1	-	-	-	-	-	-	1
\$3.50 to \$3.99.....	(D)	2	-	1	-	-	-	-	-	-	1
1497.—NATURAL ABRASIVES, EXCEPT SAND											
Total.....	229	6	-	1	3	2	-	-	-	-	-
Less than \$1.00.....	72	{	1	-	-	1	-	-	-	-	-
\$1.50 to \$1.99.....			2	-	-	2	-	-	-	-	-
\$2.00 to \$2.49.....	157	{	2	-	-	1	-	-	-	-	-
\$2.50 to \$2.99.....			1	-	1	-	-	-	-	-	-
1498.—PEAT											
Total.....	304	13	-	3	5	1	1	-	-	-	3
\$1.00 to \$1.49.....	122	4	-	-	3	-	1	-	-	-	-
\$1.50 to \$1.99.....	143	6	-	2	2	1	-	-	-	-	1
\$2.00 to \$2.99.....	39	{	2	-	1	-	-	-	-	-	1
\$4.00 to \$4.49.....			1	-	-	-	-	-	-	-	-

See footnotes at end of table.



TABLE 11. **Hourly Earnings of Production, Development, and Exploration Workers for Establishments with 10 or More Employees, by Geographic Divisions: 1963**—Continued

Hourly earnings classes	Number of employees <sup>1</sup>	Number of establishments with 10 or more employees in—									
		Total	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
1499.—NONMETALLIC MINERALS, N.E.C.											
Total.....	1,710	26	1	1	-	-	2	1	2	11	8
less than \$1.00.....	48	1	-	-	-	-	-	-	-	1	-
\$1.00 to \$1.49.....		2	-	1	-	-	-	1	-	-	-
\$1.50 to \$1.99.....	285	6	-	-	-	-	1	-	2	2	1
\$2.00 to \$2.49.....	240	4	1	-	-	-	-	-	-	3	-
\$2.50 to \$2.99.....	283	5	-	-	-	-	-	-	-	4	1
\$3.00 to \$3.49.....	854	6	-	-	-	-	1	-	-	1	4
\$3.50 to \$3.99.....		1	-	-	-	-	-	-	-	-	1
\$4.00 and over.....		1	-	-	-	-	-	-	-	-	1

Standard Notes: - Represent zero.

(D) Withheld to avoid disclosing figures for individual companies.

(NA) Not available.

(X) Not applicable.

n.e.c. Not elsewhere classified.

<sup>1</sup>Excludes figures for separately reported central offices and related facilities.

TABLE 12. Distribution of Operating Companies, by Employment Size and by Number of Establishments: 1963

Establishment count	Number of-		Number of establishments with average employment of-									
	Operating companies	Employees	Total	0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
1481.--NONMETALLIC MINERALS SERVICES												
Total.....	118	871	119	72	25	11	8	3	-	-	-	-
Multiunit companies, total.....	6	205	7	-	-	3	3	1	-	-	-	-
1 establishment <sup>1</sup> .....	5	205	5	-	-	3	2	-	-	-	-	-
2 establishments.....	1		2	-	-	-	1	1	-	-	-	-
Single unit companies.....	112	666	112	72	25	8	5	2	-	-	-	-
1492.--GYPSUM												
Total.....	33	458	37	13	12	6	4	2	-	-	-	-
Multiunit companies, total.....	10	261	14	1	6	3	3	1	-	-	-	-
1 establishment <sup>1</sup> .....	6	89	6	1	2	1	2	-	-	-	-	-
2 establishments.....	4	172	8	-	4	2	1	1	-	-	-	-
Single unit companies.....	23	197	23	12	6	3	1	1	-	-	-	-
1493.--MICA												
Total.....	31	398	34	17	3	8	4	2	-	-	-	-
Multiunit companies, total.....	5	158	8	1	-	5	1	1	-	-	-	-
1 establishment <sup>1</sup> .....	3	158	3	1	-	2	-	-	-	-	-	-
2 establishments.....	1		2	-	-	1	-	1	-	-	-	-
3 or 4 establishments.....	1		3	-	-	2	1	-	-	-	-	-
Single unit companies.....	26	240	26	16	3	3	3	1	-	-	-	-
1494.--NATIVE ASPHALT AND BITUMENS												
Total.....	11	422	13	4	3	2	1	2	1	-	-	-
Multiunit companies, total.....	7	405	9	2	1	2	1	2	1	-	-	-
1 establishment <sup>1</sup> .....	5	405	5	1	-	1	-	2	1	-	-	-
2 establishments.....	2		4	1	1	1	1	-	-	-	-	-
Single unit companies.....	4	17	4	2	2	-	-	-	-	-	-	-
1495.--PUMICE AND PUMICITE												
Total.....	83	247	85	70	9	5	1	-	-	-	-	-
Multiunit companies, total.....	11	50	13	9	3	1	-	-	-	-	-	-
1 establishment <sup>1</sup> .....	9	36	13	6	2	1	-	-	-	-	-	-
2 establishments.....	2	14		3	1	-	-	-	-	-	-	-
Single unit companies.....	72	197	72	61	6	4	1	-	-	-	-	-
1496.--TALC, SOAPSTONE, AND PYROPHYLLITE												
Total.....	43	1,276	65	36	7	13	2	4	2	1	-	-
Multiunit companies, total.....	17	1,097	39	19	4	8	2	3	2	1	-	-
1 establishment <sup>1</sup> .....	12	689	12	3	1	4	1	1	1	1	-	-
2 establishments.....	1	408	2	1	-	1	-	-	-	-	-	-
3 or 4 establishments.....	2		7	-	2	1	1	2	1	-	-	-
7 to 9 establishments.....	1		8	6	1	1	-	-	-	-	-	-
10 to 14 establishments.....	1		10	9	-	1	-	-	-	-	-	-
Single unit companies.....	26	179	26	17	3	5	-	1	-	-	-	-
1497.--NATURAL ABRASIVES, EXCEPT SAND												
Total.....	23	294	23	13	4	1	4	-	1	-	-	-
Multiunit companies, total.....	7	214	7	2	1	1	2	-	1	-	-	-
1 establishment <sup>1</sup> .....	7	214	7	2	1	1	2	-	1	-	-	-
Single unit companies.....	16	80	16	11	3	-	2	-	-	-	-	-
1498.--PEAT												
Total.....	108	504	109	84	12	9	2	2	-	-	-	-
Multiunit companies, total.....	5	177	6	-	3	-	1	2	-	-	-	-
1 establishment <sup>1</sup> .....	4	177	4	-	3	-	-	1	-	-	-	-
2 establishments.....	1		2	-	-	-	1	1	-	-	-	-
Single unit companies.....	103	327	103	84	9	9	1	-	-	-	-	-

See footnotes at end of table.

TABLE 12. Distribution of Operating Companies by Employment Size and by Number of Establishments: 1963—Continued

Establishment count	Number of—		Number of establishments with average employment of—									
	Operating companies	Employees	Total	0 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees and over
1499.--NONMETALLIC MINERALS, N.E.C.												
Total.....	81	1,878	87	47	14	8	11	2	4	-	1	-
Multiunit companies, total.....	14	1,511	20	4	1	2	6	2	4	-	1	-
1 establishment <sup>1</sup> .....	10	454	10	4	-	2	2	-	2	-	-	-
2 establishments.....	2	1,057	4	-	-	-	2	1	1	-	-	-
3 or 4 establishments.....	2		6	-	1	-	2	1	1	-	1	-
Single unit companies.....	67	367	67	43	13	6	5	-	-	-	-	-

Standard Notes: - Represents zero. (D) Withheld to avoid disclosing figures for individual companies. (NA) Not available. (X) Not applicable.  
n.e.c. Not elsewhere classified.  
<sup>1</sup>Represents companies having at least one establishment classified in other industries.

# Appendix A

## MINERALS CENSUS REPORT FORMS AND PUNCHCARDS

For the 1963 Census of Mineral Industries, 25 different establishment forms were used. These included 18 standard forms for use by large and multiestablishment companies and 7 short forms used for small establishments. In addition, a few special-purpose and supplementary forms were used.

The standard forms were essentially similar, with adaptations to specific industries. The principal adaptations were made in Item 4, "Man-hours of production, development, and exploration workers, by department or by kind of work;" Item 9, "Purchased fuels consumed;" Item 11, "Supplies used and minerals for preparation," or "Data on minerals received from other establishments for preparation and on minerals mined and prepared in the same establishment;" Item 12, "Products and services;" Item 14, "Type of operation," or "Number of wells operated" (for oil and gas extraction establishments); Item 15, "Number of production, development, and exploration workers, by month" (for industries in which seasonal employment levels were not adequately represented by quarterly figures), or "Cost of drilling and equipping wells" (for oil and gas extraction industries); and Item 16, "State and county data." The State data in item 16 were used for area classification, by State, in reports for an entire State or district or for all operations in the United States, such as oil and gas field and service reports. The county data in item 16 on employment, quantity production, receipts for services, and capital expenditures provided the basis for allocating payrolls, value of shipments and receipts, and certain other data, by county.

Of the standard forms used in this census, Form MC-10B, "Copper, Lead, Zinc, Gold, and Silver Ores" (see pages A-2 to A-5) is representative of forms for operators of metal ores properties. Form MC-12A, "Coal" (see pages A-16 to A-19), was used for operators of anthracite, bituminous coal, and lignite mining properties. Form MC-13A, "Crude Petroleum and Natural Gas" (see pages A-24 to A-29), is representative of the forms for operators of oil and gas extraction properties. Form MC-13C, "Oil and Gas Field Services" (see pages A-30 to A-35), is typical of information requested for mineral

services establishments. For establishments engaged both in operation of oil and gas field properties and in oil and gas field services, a consolidated form, MC-13D, "Oil and Gas Field Operations," was provided, and for operators of offshore oil and gas properties, a supplemental form, MC-13X, "Offshore Oil and Gas Operations," was used. A company summary form, MC-13Y, "Oil and Gas Field Operations," was also used.

The complete instructions provided for form MC-10B are shown on pages A-6 to A-9. The same set of instructions was provided for all operators reporting on standard forms for the metal mining industries. These instructions are very similar to those used for coal mining and nonmetallic minerals, except fuels, mining. There were additional differences between these instructions and those used for the oil and gas extraction industries. A sample of the latter is shown on pages A-20 to A-23. In all, four separate sets of instructions were provided to accompany the standard forms.

Of the seven short forms provided, one was for metal mining, one for coal mining, two for oil and gas extraction, and three were for non-metallic minerals mining. About 21,000 of approximately 41,000 tabulated reports in the 1963 minerals census were prepared on short forms. Such forms were used for very small establishments in almost all industries. Except for oil and gas extraction, data for use on short forms were collected by the Bureau of Mines; forms such as MC-10S, "Metallic Ores," were used to provide the Census Bureau with type of operation and commodity data directly from Bureau of Mines current surveys. Bureau of Mines Form 6-1052 is typical of forms used by the Bureau of Mines to collect other information required by the Census Bureau. For the oil and gas extraction area, all short forms were collected by Census. Form MC-13S-1 is representative of these forms.

Some special-purpose forms and supplementary forms were also used; for example, the form for reporting offshore oil and gas operations referred to earlier. Also, a form was provided for reporting separately operated central offices or auxiliaries. A special short form was used for a supplementary mailing to oil and gas contractors to obtain the names and addresses of oil and gas producers served. Other special short forms were used to complete the coverage of very small and no-employee establishments for which names and addresses were obtained in Bureau of Mines and other lists. (See also Introduction, section 12.)

Typical punchcards used in tabulating the 1963 Census of Mineral Industries data are shown on page A-44.

# PENALTIES FOR FAILURE TO REPORT

Form Approved: Budget Bureau No. 41-6

FORM MC-10B  
(1002)

U.S. DEPARTMENT OF COMMERCE  
BUREAU OF THE CENSUS

## 1963 CENSUS OF MINERAL INDUSTRIES COPPER, LEAD, ZINC, GOLD, AND SILVER ORES

### PLEASE NOTE:

- The Census Bureau reviews your report for omissions, inconsistencies, and unusual ratios. Incomplete and inaccurate answers will result in correspondence which is both costly and time consuming.
- If book records are not available, reasonably accurate estimates for most items are acceptable for the statistical purposes of this survey.
- A separate report is required from the operator for each mine or separately operated mill or washing plant.
- Please complete and return this form in the envelope provided to the **Jeffersonville Census Operations Office, Jeffersonville, Indiana**. If filing by due date causes an undue burden, a request for extension should be directed to that office.

### E. PLEASE READ INSTRUCTIONS BEFORE COMPLETING REPORT

**IMPORTANT:** Figures for dollars, man-hours, and KWH should be rounded to THOUSANDS. If you wish you may report to the nearest unit. In either case, please be careful to enter your figures in the CORRECT COLUMNS.

### EXAMPLE

If the payroll is \$1,125,628.28:

Preferred method →

Acceptable method →

Mil- lions	Thou- sands	Dol- lars	Cents
000	000	000	XX
\$ 1	126		XX
\$ 1	125	628	XX

### ITEM 1. GENERAL INFORMATION

#### A. NAME OF ESTABLISHMENT

**B. PHYSICAL LOCATION OF ESTABLISHMENT on December 31, 1963.** (Your answers to this item should relate to the ACTUAL PHYSICAL LOCATION of this establishment which may be different from the mailing address.)

(1) Street and number at establishment location\*

\*If establishment location cannot be described by street and number, give name (and number, if any) of road or highway and sufficient information to locate establishment, e.g., Rt. 25, 3 miles south of Charlottesville.

**CONFIDENTIAL**—Response to this inquiry is required by Act of Congress (13 U.S.C.). This report you submit to the Census Bureau is confidential and may be seen only by sworn Census employees. It may not be used for purposes of taxation, investigation, or regulation. Copies retained in your files are also immune from legal process.

In correspondence pertaining to this report please refer to the 11-digit file number in the box above your name.



MC-10B (1002)

(Please correct if mailing address has changed)

COMPLETE EVERY ITEM (Enter "0" where appropriate)		1963	
ITEM 2A NUMBER OF EMPLOYEES IN 1963	a. Number of production, development, and exploration workers during pay period ended nearest 15th of—	(1) March	
		(2) May	
		(3) August	
		(4) November	
b. Sum of Lines (1) through (4)			
c. AVERAGE NUMBER (divide sum on Line b by 4)			
d. All other employees, March 15th			
e. TOTAL NUMBER OF EMPLOYEES (Sum of Lines c and d)		→	
ITEM 2B—PRO- PRIETORS AND FIRM MEMBERS IN 1963	a. Total number of proprietors and firm members (not applicable to corporations)		
	b. Number of proprietors and firm members (included in a above) regularly performing production, development, or exploration work at this establishment		
ITEM 3 PAYROLLS IN 1963	a. Production, development, and exploration worker wages	Millions	Cents
	b. All other employee salaries and wages	\$	XX
	c. TOTAL PAYROLL (Sum of Lines a and b)	\$	XX
ITEM 4 MAN-HOURS OF PRODUC- TION, DEVELOP- MENT, AND EXPLORATION WORKERS BY DEPART- MENTS IN 1963	a. At mine (Mining, exploration, and development)	Millions	Thous.
	(1) Underground		XX
	(2) Open-pit		XX
	(3) Surface (including mine shops and yards)		XX
b. At mill or washing plant (including auxiliary works for this mill)			
c. TOTAL PRODUCTION, DEVELOPMENT, AND EXPLORATION WORKER MAN-HOURS (Sum of a and b)			
d. Man-hours included above which were spent on exploration and development			

(2) Place (Check type of place and enter name)		Name of place					
Type (Check first applicable one)							
<input type="checkbox"/> City							
<input type="checkbox"/> Village or Borough							
<input type="checkbox"/> Town							
<input type="checkbox"/> Township							
<input type="checkbox"/> Other (Specify)							
(3) Is the establishment within the legal boundary of the place reported in (2) above?		Yes <input type="checkbox"/>	No <input type="checkbox"/>				
(4) County							
(5) State							
<b>C. FORM OF OWNERSHIP AT END OF 1963</b> (Check one) 1 <input type="checkbox"/> Individual proprietor 2 <input type="checkbox"/> Partnership 0 <input type="checkbox"/> Corporation (Do not include any form of cooperative association) 8 <input type="checkbox"/> Cooperative association (corporate or noncorporate) 9 <input type="checkbox"/> Other (Specify) _____							
<b>D. FEDERAL SOCIAL SECURITY IDENTIFICATION NUMBER</b> Enter identification number used for this establishment (as shown on Employer's Quarterly Federal Tax Return, Treasury Form 941). _____							
<b>E. COMPANY ORGANIZATION</b> (1) Does this company operate more than one place of business under the same Identification Number shown in D above? Yes <input type="checkbox"/> No <input type="checkbox"/> (2) Does this company own or control another company? Yes <input type="checkbox"/> No <input type="checkbox"/> (3) Is this company owned or controlled by another company? Yes <input type="checkbox"/> No <input type="checkbox"/> (If "Yes," is checked in Part (3), give name and address of owning or controlling company.) _____							
<b>FOR CENSUS USE ONLY</b>							
1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

ITEM 5 COST OF SUPPLIES, MINERALS RECEIVED FOR TREATMENT, FUELS, ELECTRICITY, CONTRACT WORK, AND MACHINERY IN 1963	ITEM 6 CAPITAL EXPENDITURES DURING 1963 (Exclude land and mineral rights)	ITEM 7 QUANTITY OF ELECTRICITY IN 1963	ITEM 8 WATER INTAKE IN 1963	ITEM 9 FUELS CONSUMED IN 1963	ITEM 10 HORSE-POWER RATING OF POWER EQUIPMENT AT END OF 1963
a. Supplies used and minerals received for milling b. Products bought and resold without further processing c. Purchased fuels consumed d. Purchased electricity e. Contract work done for you by others f. <b>TOTAL COST, excluding purchased machinery (Sum of Lines a through e)</b> → g. Purchased machinery installed (include all new and used machinery, equipment, parts, and used plant not reported above)	a. Development and exploration of mineral property b. Mill or washing plant construction and other construction c. New machinery and new equipment (including capitalized repairs) d. Used plant and used equipment acquired from others e. <b>TOTAL CAPITAL EXPENDITURES (Sum of Lines a through d)</b> → a. Purchased electricity (for which cost is reported in Item 5d) b. Generated electricity (gross less generating station use) c. Electricity sold or transferred to other establishments (Report its value in Item 12A, Line 16)	a. Total quantity of water intake (fresh and brackish, including mine water) in this establishment during 1963. (Check ONE box only) 1 <input type="checkbox"/> Under 1 million gallons      4 <input type="checkbox"/> 20 through 99 million gallons 2 <input type="checkbox"/> 1 through 9 million gallons      5 <input type="checkbox"/> 100 million gallons or over. 3 <input type="checkbox"/> 10 through 19 million gallons	a. <b>Coal:</b> Bituminous, lignite, and anthracite b. <b>Fuel oil:</b> (1) Distillate, light, Grades 1-4 (P.S. 100, 200) (2) Residual, heavy, Grades 5, 6 (P.S. 300, 400) c. <b>Gas:</b> Natural, manufactured, and mixed d. <b>Gasoline</b> e. <b>Other fuels:</b> Liquefied petroleum gas, coke, wood, and other f. <b>TOTAL COST OF PURCHASED FUELS CONSUMED</b> → (Sum of a through e; should be the same as Item 5c)	Kind of power equipment a. Internal combustion engines, steam engines and turbines, and other prime movers: (1) In high-way-type equipment (2) In all other equipment (a) Driving generators (b) Not driving generators b. Electric motors (1 horsepower and over)	

Total horsepower rating of—		All other equipment, a, b, c, d, e	
Loading equipment 1	Transportation equipment 2		
C	D		
31	hp		
32	hp		
33	hp		
34	hp		

Total horsepower rating of—		All other equipment, a, b, c, d, e	
Loading equipment 1	Transportation equipment 2		
C	D		
31	hp		
32	hp		
33	hp		
34	hp		

<sup>1</sup> Include power units for shovels, dragline excavators, scrapers, and other mechanical loading equipment, both underground and surface.

<sup>2</sup> Include power units for locomotives, tractors, trucks, shaft hoists, and other haulage units.

<sup>3</sup> Include power units for drills, compressors, pumps, machine tools, planing machinery, etc.

FORM MC-10B  
(1002)U.S. DEPARTMENT OF COMMERCE  
BUREAU OF THE CENSUS**1963 CENSUS OF MINERAL INDUSTRIES**  
**COPPER, LEAD, ZINC, GOLD, AND SILVER ORES****PLEASE NOTE:**

- A.** The Census Bureau reviews your report for omissions, inconsistencies, and unusual ratios. Incomplete and inaccurate answers will result in correspondence which is both costly and time consuming.
- B.** If book records are not available, reasonably accurate estimates for most items are acceptable for the statistical purposes of this survey.
- C.** A separate report is required from the operator for each mine or separately operated mill or washing plant.
- D.** Please complete and return this form in the envelope provided to the **Jeffersonville Census Operations Office, Jeffersonville, Indiana**. If filing by due date causes an undue burden, a request for extension should be directed to that office.

**E. PLEASE READ INSTRUCTIONS BEFORE COMPLETING REPORT**

**IMPORTANT:** Figures for dollars, man-hours, and KWH should be rounded to THOUSANDS. If you wish you may report to the nearest unit. In either case, **please be careful to enter your figures in the CORRECT COLUMNS.**

**EXAMPLE**

If the payroll is \$1,125,628.28:

Preferred method →

Acceptable method →

Mil- lions	Thou- sands	Dol- lars	Cen- t
000	000	000	XX
\$ 1	126		XX
\$ 1	125	628	XX

**ITEM 1. GENERAL INFORMATION****A. NAME OF ESTABLISHMENT**

**B. PHYSICAL LOCATION OF ESTABLISHMENT on December 31, 1963.** (Your answers to this item should relate to the ACTUAL PHYSICAL LOCATION of this establishment which may be different from the mailing address.)

(1) Street and number at establishment location\*

\*If establishment location cannot be described by street and number, give name (and number, if any) of road or highway and sufficient information to locate establishment, e.g., Rt. 25, 3 miles south of Charlottesville.

(2) Place (Check type of place and enter name)

Type  
(Check first  
applicable one)

Name of place

**CONFIDENTIAL**—Response to this inquiry is required by Act of Congress (13 U.S.C.). report you submit to the Census Bureau is confidential and may be seen only by sworn Census employees. It may not be used for purposes of taxation, investigation, or regulation. Confidentiality in your files are also immune from legal process.

In correspondence pertaining to this report please refer to the 11-digit file number in the box above your name.

MC-10B (1002)

**KEEP THIS COPY FOR YOUR FILES****PLEASE COMPLETE AND RETURN THE FORM WHICH SHOWS YOUR NAME AND ADDRESS**

(Please correct if mailing address has changed)

COMPLETE EVERY ITEM (Enter "0" where appropriate)				1963			
<b>ITEM 2A NUMBER OF EMPLOYEES IN 1963</b>	<b>a.</b> Number of production, development, and exploration workers during pay period ended nearest 15th of—	(1) March					
		(2) May					
		(3) August					
		(4) November					
<b>b. Sum of Lines (1) through (4)</b>							
<b>c. AVERAGE NUMBER (divide sum on Line b by 4)</b>							
<b>d. All other employees, March 15th</b>							
<b>e. TOTAL NUMBER OF EMPLOYEES (Sum of Lines c and d)</b>							
<b>ITEM 2B—PRO- PRIETORS AND FIRM MEMBERS IN 1963</b>	<b>a.</b> Total number of proprietors and firm members (not applicable to corporations)						
	<b>b.</b> Number of proprietors and firm members (included in a above) regularly performing production, development, or exploration work at this establishment						
<b>ITEM 3 PAYROLLS IN 1963</b>	<b>a.</b> Production, development, and exploration worker wages	Millions	Thous.	Dols.	Cen- t		
	<b>b.</b> All other employee salaries and wages	\$					
	<b>c. TOTAL PAYROLL (Sum of Lines a and b)</b>	\$					
<b>ITEM 4 MAN-HOURS OF PRODUC- TION, DEVELOP- MENT, AND EXPLORATION WORKERS BY DEPART- MENTS IN 1963</b>	<b>a.</b> At mine (Mining, exploration, and development)	(1) Underground	Millions	Thous.	Hours		
		(2) Open-pit					
		(3) Surface (including mine shops and yards)					
		<b>b.</b> At mill or washing plant (including auxiliary works for this mill)					
<b>c. TOTAL PRODUCTION, DEVELOPMENT, AND EXPLORATION WORKER MAN-HOURS (Sum of a and b)</b>							
<b>d.</b> Man-hours included above which were spent on exploration and development							

ITEM 13 CHANGES IN OWNERSHIP OR OPERATION OF THIS ESTABLISHMENT IN 1963		(Check proper box and furnish information)		1963		Yes		No		(Check proper box and furnish information)		Yes	
a. Purchased or leased by you (Enter date, name, and address of former owner or lessee in Item 19.)										d. Reorganized (partnership change or change in corporate status)			
b. Sold or leased (Enter date, name, and address of purchaser or lessee in Item 19.)										e. Started new business (no previous operator)			
c. Went out of business (no new operator) (Specify date in Item 19.)										f. Remained the same as in the previous year			
ITEM 14 TYPE OF OPERATION IN 1963		Type		8		8-1		0		Code		Check	
a. Mining methods (Check one or more)		(1) Open-pit or surface placer deposit		620									
		(2) Under-ground (Check dominant underground mining method only.)		631									
		Shrinkage stoping		632									
		Square setting		633									
		Cut-and-fill stoping		634									
		Block caving		635									
		Sublevel caving, top slicing, and other (Specify)		639									
ITEM 15		Not applicable to this form											
ITEM 16 METAL CONTENT		METALS CONTAINED IN COPPER, LEAD, ZINC, AND SILVER BEARING ORES, BASED ON ASSAY CONTENT OF ORES AND CONCENTRATES REPORTED IN ITEM 12A (Report metal content of production, where both production and shipments are reported in Item 12A)											
		Description		9		9-1		9-2		9-3		9-4	
				Cen- sus code		DO NOT USE		Copper (Pounds)		Lead (Pounds)		Zinc (Pounds)	
		For shipment to smelters		1		991							
		For shipment or transfer to other mills for treatment		2		992							
		Copper		3		993							
		Lead		4		994							
		Zinc		5		995							
		Other (Specify)		6		996							
		Recovered by amalgamation		7		997							
		Recovered by cyanidation		8		998							
		Copper-water precipitates (including precipitates from ore leached in place)		9		999							
		a. TOTAL QUANTITY (Sum of Lines 1 through 9)		10									
ITEM 17		Not applicable to this form											
ITEM 18 CHECKS TO ASSURE COMPLETE AND ACCURATE REPORTING		The Census Bureau reviews your report for omissions, inconsistencies, and unusual ratios. To save you future correspondence about these problems, please make the following checks before returning your report:											
		"Reasonableness" check											
		Calculation required for each check											
		Item 3a (Production worker wages) ÷ Item 4c (Man-hours of production workers)											
		Item 4c (Man-hours of production workers) X 1,000 ÷ Item 2Ac (Average number of production workers)											
		Item 3c (Total payroll) ÷ Item 12Ac (Total value of shipments and receipts)											
		Item 5f (Total supplies, etc. cost) ÷ Item 12Ac (Total value of shipments and receipts)											
ITEM 19		REMARKS—Please use another sheet of paper and attach to this report.											
ITEM 20		Name of person to be contacted regarding this report.											
ITEM 21		CERTIFICATION—This report is substantially accurate and has been prepared in accordance with instructions.											
		PERIOD OF REPORT											
		This report covers the period—											
		From		To		Signature of authorized official		Title		Address		Telephone No.	
		Date											



# 1963 CENSUS OF MINERAL INDUSTRIES

## REPORTING INSTRUCTIONS FOR METAL MINING

Forms MC-10A, MC-10B, MC-10C, and MC-10D.

*In all correspondence with the Census Bureau, please include the 11-digit file number which appears in the address box of the report form. High-speed electronic equipment will be used to identify both the correspondence and the reports in the 1963 Economic Censuses. If your correspondence does not include the Census file number, it will be returned for the addition of that number. Address all correspondence to JEFFERSONVILLE CENSUS OPERATIONS OFFICE, 1201 East 10th Street, Jeffersonville, Indiana.*

*Please do not mark or mar the two lines of symbols above the address on each form. These symbols or rectangles, which are unique to each establishment, will be photographed and used to record mechanically the receipt of your report form.*

*As you complete the report for each establishment, please enter the 11-digit file number at the top of the odd-numbered pages as requested.*

This booklet is provided to assist you in filling out the enclosed Census of Mineral Industries form(s) MC-10A through MC-10D. Please read these instructions and those appearing on the individual report forms for each item before entering your figures.

### A. Who Should Report?

The Census of Mineral Industries reports are required by an Act of Congress (13 U.S.C.). The reports submitted are confidential and may be seen only by sworn Census employees. They may not be used for purposes of taxation, investigation, or regulation. Copies retained in your files are also immune from legal process.

Every concern is required to submit a separate Census report for each of its mineral establishments in the United States, including mines under development and treatment or agglomeration plants under construction. Enterprises with more than one establishment must submit a separate report for each establishment operated during all or any part of 1963. Reports should be returned to the Jeffersonville Census Operations Office as shown on the enclosed envelope.

Each report should be submitted by the operator of the establishment, whether he is the owner or is operating it under lease or contract.

Based on Census Bureau records, a report form is provided for each establishment which your company operated in 1963. If you have not received sufficient forms to cover all the mining establishments operated by your company, write for additional copies. Be sure to describe the type of activity carried on at the establishments for which you request additional forms.

#### 1. What Is a Mineral Establishment?

For purposes of the Census, a mineral establishment is defined as a single physical location where mineral operations are performed; for example, a mine only (a mine may be a lode operation, a pit, a beach, or a placer deposit), a mine and treatment plant (such plants may be engaged in milling, washing, agglomeration, or other types of mineral treatment), or a treatment plant only. Since the information reported will be summarized to totals for each industry, State, and county, separate reports are required for different physical locations even though the establishments may be engaged in the same type of mining.

Thus, a mineral establishment represents a working or group of workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or treatment process. Individual shafts, openings, or sites should

not necessarily be considered as individual mines; open-pit mines, however, should be reported separately from underground mines wherever possible. Plants engaged solely in beneficiating, milling, or treating minerals mined at other locations should be reported separately.

In completing your reports, a limited amount of prorating or estimating is acceptable when book records are not readily available.

#### 2. How To Report for Establishments With No Production During 1963

If any of your company's mineral establishments had no production at all during 1963, you should nevertheless return the report for each such establishment with all other information completed and with "None" entered in Item 12. If a mineral location was not in production, but had custodial employees, maintained inventories, or made shipments during the year, the information should be reported in the appropriate section of the report form. The Census includes sites under exploration, mines under development or maintenance only, and plants under construction.

### B. What Activities Should Be Reported?

Each report should cover the operations of a mine--underground, open-pit, or placer working--together with its associated shops, auxiliary units, yards, mill, beneficiating, treatment, or washing plant; and offices; or it should cover a mill, or beneficiating or treatment plant not at the site of the mines served, or operated under separate management from the mines, together with its associated shops, auxiliary units, and offices. The report should also include such activities as generating energy for the mine or plant (a central power plant serving two or more mineral establishments should be included in the report for that establishment to which the power plant furnishes the greatest quantity of electric energy); maintenance of mine, plant, and equipment; and receiving, shipping, storage, research, record keeping, health, safety, cafeteria, and other services, when carried on at the same physical location by the mineral establishment. The report should exclude the operation of company stores, boarding houses, bunk houses, and recreational facilities. The report should also exclude sales branches, research laboratories, and general administrative offices, if they were operated as separate establishments. Such operations should be reported, where applicable, on separate Census of Business, Census of Manufactures, or Central office or auxiliary forms available for such establishments.

Sintering plants operated in conjunction with blast furnaces should be included in your report on a Census of Manufactures form covering blast furnaces. With the exception of

mercury, the report should not include the recovery of metals through smelting or refining. Smelting or refining activities should be reported on applicable Census of Manufactures forms.

### C. What Period Should Each Report Cover?

Each report should cover the calendar year 1963. If your book records are not on a calendar year basis, carefully prepared estimates will be acceptable. If reporting on a calendar year basis will involve considerable additional costs, and your fiscal year covers at least 10 months of calendar year 1963 (i.e., ends between October 31, 1963 and February 29, 1964), you may report on a fiscal basis. However, all employment, payroll, and man-hour figures should relate to the calendar year rather than the fiscal year. (These calendar year payroll records should be available from your tax records.)

In the certification, the dates should show the exact period which the report covers. Thus, if an establishment began to operate or ceased to operate within the year, the dates should span only that part of the year during which the mine or treatment plant was in operation. If the ownership changed during the year, complete the report only for that part of 1963 in which your company owned and operated the establishment. Report in Item 13 the appropriate information on changes in ownership or operations.

### D. How Should Multiple Establishment Companies Determine Transfer Values of Products and Materials From One Establishment to Another ("Interplant Transfers")?

One of the important statistical measures of mining activity is "value added by mining," which is derived by the Census Bureau from the figures reported for value of shipments; capital expenditures; and cost of supplies, purchased fuels and electric energy, contract work, and purchased machinery installed during the year.

In order for statistics on value added and other subjects to be comparable from industry to industry or area to area, it is necessary that the operations of each establishment of a multiple establishment organization be reported as though the establishment were a separate "economic" unit. This means that the value of interplant transfers within a company should include, in addition to direct costs of production, a reasonable proportion of "all other costs (company overhead) and profits." The establishments receiving such transfers should report them as purchased minerals for treatment, supplies, fuels, or electric energy at the same value plus costs of freight and other direct handling charges. (See Item 5.)

## ITEMS ON THE REPORT FORM

### Item 1. (See instructions on Form.)

**Item 1C.** Report the form of ownership of the operating company at the end of 1963 for the establishment covered by the report.

**Item 1E.** Report the company organization of the operating company for the establishment covered by the report.

**Item 2A.** Number of employees.—(You may follow the definition of employees specified by your State Employment Security Agency.)—Report part-time and full-time employees at the establishment who worked or received pay for any part of the pay period (preferably one week) ending nearest the 15th of the specified months (i.e., March, May, August, and November of 1963 for "production, development, and exploration workers" and March only for "all other employees"). Include all persons on paid sick leave, paid holidays, and paid vacation during these pay periods; exclude members of armed forces and pensioners carried on your active rolls. Include officers at this establishment, if a corporation; if an unincorporated concern, exclude proprietor or partners. Exclude workers at blast furnaces, smelters, and other manufacturing plants, company stores, boarding houses, bunk houses, and recreational centers.

**Item 2A, Lines b and c.**—Divide the total on Line b by FOUR and enter the result on Line c; divide by FOUR even if the establishment did not operate in all four periods.

**Item 3.** Payrolls.—(You should follow the definition of salaries and wages that is used for calculating the withholding tax.) Report the gross earnings paid in calendar year 1963 to employees on the payroll at the establishment prior to such deductions as employee's Social Security contributions, withholding taxes, group insurance premiums, union dues, and savings bonds. Include in gross earnings commissions, dismissal pay, pay bonuses, vacation and sick-leave pay, and the cash equivalent of compensation paid in kind, such as board and housing. Include salaries of officers of this establishment, if a corporation; if an unincorporated concern, exclude payments to proprietor or partners. Exclude payments to members of armed forces, and pensioners carried on your active payroll.

Exclude here, but include in Item 5a, the cost of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production, development, and exploration work but charged to employees and deducted from their wages.

**Item 4.**—Man-Hours of Production, Development, and Exploration Workers, by Departments.—The man-hour figures are designed to measure the over-all activity of the establishment during the year on both active and inactive days. The figures should represent all man-hours worked or paid for, except hours for paid vacations, holidays, or sick leave, when the employee was not at the establishment. If an employee elects to work during the vacation period, report only actual hours worked by such employee. Overtime hours should be reported as actual hours worked, not straight-time equivalent hours.

The figures should account for all man-hours worked at this establishment for the entire year by all full-time and part-time production, development, and exploration workers reported in Item 2A. Exclude hours worked by employees of contractors or by proprietors, partners, or firm members.

**Item 5.** Cost of Supplies, Minerals Received for Treatment, Fuels, Electricity, Contract Work, and Machinery.—The entries in this item are used by the Census Bureau to calculate the 1963 value added by mining. The figures reported should represent the total purchase cost of supplies, minerals received for treatment, milling, or beneficiation, fuels, etc., actually used or processed during 1963. Include items charged to both the current and capital accounts.

Include items consumed by the establishment during the year although purchased prior to 1963; minerals received from other mines for beneficiation, milling, or treatment (these should also be reported separately in Item 11), purchased supplies consumed for production, development, exploration, maintenance, and repair of mine, plant, and equipment, and in plant construction; supplies which you furnished without charge to contractors or sold to employees for use at this establishment; consumption of items received from other establishments of your company for which separate reports are being submitted.

Exclude items received during the year which were not consumed; services such as advertising, telephone, telegraph, cable, insurance, development, and research rendered by other establishments to this establishment, or services of engineering, management, marketing, legal, and other professional consultants, etc.; expenses such as depreciation and depletion charges against plant and equipment, rent and rental allowances, interest payments, royalties, and use of patent fees; supplies (such as timber or lumber), parts, or machinery produced at this establishment; extraordinary losses such as by fire and flood; and wages of your employees engaged in maintenance and repair work (these should be reported in Item 3).

If your records do not show the amounts actually consumed or processed during 1963, the figures to report may be derived from purchase and other records. Cost of purchases may be used if these do not differ significantly from the amounts actually used. However, if consumption of any

major item differs significantly from purchases, the amount used may be estimated by adding beginning-of-year inventories to the amounts purchased and subtracting from this total the cost of supplies on hand at the end of the year.

Cost is delivered cost and should be the amount actually paid or payable after discounts and should include freight and other direct charges incurred by the establishment in acquiring supplies consumed. The cost figures for consumption should represent receipts from all sources, i.e., amounts purchased from other establishments, withdrawn from inventories, or obtained from other establishments of the same company. However, if ores were mined in this establishment in 1963 and also treated in this establishment, the value of the crude ores should not be included in the value figures reported.

For supplies, minerals for treatment, fuels, and electric energy received from other establishments of your company, cost should be checked against the values reported for the establishment producing and transferring the supply (see Section D on page 2 of these Instructions). Freight and other direct handling charges should be added.

**Item 5a. Cost of Supplies Used and Minerals Received for Treatment or Agglomeration.**--The following list of examples of supplies will indicate the types of items which should be included. The list is shown only as an example. It should not be considered a complete list of the items which should be included.

Bearings	Hardware
Bolts, screws, and nuts	Headlights and lamps
Brake blocks and linings	Industrial diamonds
Belting and screen cloth	Lubricating oils
Carbon and graphite brushes	Lumber
Cement	Pipe and fittings
Chemical reagents	Piling
Dies, jigs, and fixtures	Plates and sheets
Drill bits and accessories	Rail and accessories
Explosives	Rods and bars
First aid and safety supplies	Roof bolts
Floor gratings	Stationery, stamps, and office supplies
Forgings and castings	Track accessories
Fuses	Water purchased
Grinding balls and rods	Welding rods, electrodes, and acetylene
Gears and pinions	Wire, cable, and chain
Hand tools	

Include only physical goods used or put into production. Exclude services used or overhead charges. The cost of services performed for you by others should be reported in Item 5e.

**Item 5b. Cost of Products Bought and Resold Without Further Processing.**--Report the cost of all products bought and resold in the same condition as when purchased. (Total sales value of all products resold is to be reported in Item 12A on the line for "Resales.")

**Item 5c. Purchased Fuels Consumed.**--Report the total amount actually paid or payable during 1963 for all fuels consumed for heat, power, or the generation of electricity. Include anthracite and bituminous coal, coke, natural and manufactured gas, fuel oil, liquefied petroleum gas, gasoline, wood, and all other fuels, including purchased steam.

**Item 5d. Purchased Electricity.**--Report the total amount actually paid or payable for electric energy purchased during 1963 from other companies, or received from other establishments of your company. Exclude the value of electricity generated and used at this establishment.

**Item 5e. Cost of Contract Work Done for You by Others.**--Report the total payments made for contract services performed during 1963, including payments for supplies and equipment furnished by the contractor incidental to this work.

Exclude payments to miners paid on a per ton, car, yard, or footage basis. The compensation of such workers should be included in Item 3.

If part of the payment to a contractor was in material produced, an estimate of the value of the service should be reported.

**Item 5g. Purchased Machinery Installed.**--Include all machinery, equipment, parts for renewals and repairs, and used plant which were purchased, or which were received from other establishments of your company. Include equipment which was installed in the mine, mill, treatment, beneficiating, or washing plant as well as mobile loading and transportation equipment in 1963.

**Item 6. Capital Expenditures for This Establishment (Exclude Expenditures for Land and Mineral Rights).**--Capital expenditures during 1963 may be determined by the following computation: The cost of exploration work, development work, and additions completed during the year, plus work-in-progress at the end of the year, minus work-in-progress at the beginning of the year. Labor and installation costs should be included whether on contract or by your own forces.

**Item 6a. Development and Exploration of Mineral Property.**--Report development and exploration outlays which were charged to a capital or Office of Minerals Exploration account. These should include charges to fixed assets for which depreciation or depletion accounts are ordinarily maintained for tax purposes. Include capitalized expenditures for new entries and shafts, construction of rail and other roads, test boring, surveying, and the like.

**Item 6b. Treatment or Agglomeration Plant Construction and Other Construction.**--Include expenditures for new construction, major additions, and alterations (including improvements and capitalized repairs). Include machinery which is an integral part of a building, such as a crane or a kiln. Include, where capitalized, expenditures for construction by your own employees. Exclude construction of company houses, general recreation facilities, and rail and other roads.

**Item 6c. New Machinery and New Equipment.**--Report total expenditures at this establishment for new machinery and equipment capitalized during 1963. Include replacements as well as additions to capacity. Include the value of improvements and capitalized repairs to machinery and equipment transferred from other establishments of this company. Include the value of equipment produced and used at this establishment. Include all new mining, loading, transportation, and similar equipment for use at mines; treatment plant equipment which is not an integral part of a building; as well as new office machines and fixtures, furniture, cafeteria and change-room furnishings, automobiles, trucks, and similar equipment.

**Item 6d. Used Plant and Used Equipment Acquired from Others.**--Report total expenditures at this establishment for old or existing plants and for second-hand equipment acquired from others (including the U.S. Government). Include at approximate market value machinery or equipment transferred from other plants of your company.

**Item 7. Quantity of Electricity.**--All quantities for electricity preferably should be reported in thousands of kilowatt hours. Please be careful to enter your figures in the CORRECT COLUMNS.

**Item 7a. Purchased Electricity.**--Report the quantity for which cost is reported in Item 5d.

**Item 7b. Generated Electricity.**--Enter the total quantity of electric energy generated at this establishment (gross less generating station use) during 1963.

When totals are reported on this line, data relating to the activity of the power stations would also be included in other sections of this report. For example, the number of employees assigned to the power station, their wages and man-hours should be included in the figures reported in Items 2, 3, and 4; the cost of fuels used to generate electricity, in Items 5c and 9; and the horsepower of prime movers driving generators in Item 10.

Item 7c. Electricity Sold or Transferred.--Enter the quantity of electric energy, which was also included in Items 7a and 7b, but which was sold to other companies or transferred to other establishments of your company.

Item 8. Water Intake in 1963.--If you do not have exact records of the total quantity of water intake at this establishment, estimate the amount on the basis of the approximate number of gallons for a typical working day and the number of days which your establishment was operated during 1963. Include only primary intake from natural sources; do not include recirculation.

Item 9. Fuels Consumed in 1963.--Report all fuels purchased from other companies or transferred from other establishments of your company. The total cost in Item 9 should agree with Item 5c.

If your gas is billed in therms, convert as follows:

For natural gas: 1,000 therms equal 1 cubic foot.

For manufactured gas: 600 therms equal 1 cubic foot.

Item 9d. Gasoline.--Include gasoline used in automotive equipment such as reported in Item 10.

Item 10. Horsepower Rating of Power Equipment.--Report the total horsepower rating (as indicated on nameplates) of all stationary and mobile equipment in use or available for use at the end of 1963. If more than one rating is shown report brake horsepower, if available.

Include all owned, leased, or rented equipment in use, held for emergency or standby use or temporarily idle (awaiting repairs, installations, etc.) at the mine or plant. Exclude junk.

If book or other records are not available, reasonable estimates are acceptable.

Item 10a. Internal Combustion Engines and Other Prime Movers.--Include all engines and turbines, such as steam engines and turbines, and internal-combustion engines (Diesel, gas, gasoline, etc.), hydroturbines, water wheels, and other prime movers. Include equipment driven by storage batteries.

Report the total horsepower of your equipment; do not report the number of engines or motors.

Item 10a(1). In Highway-type Equipment.--Report on this line only horsepower for transportation equipment that was licensed for highway operation in the sense that you had purchased license plates or tags for the equipment. All non-licensed equipment of similar types should be included in Item 10a(2).

Item 10a(2)(a). Driving Generators.--Report on this line only equipment for producing your own electricity. The electricity generated by this equipment should be reported in Item 7b. Do not include equipment converting alternating to direct current.

If equipment is rated only on the generator, compute the prime mover horsepower by multiplying the kilowatt rating (kw) by 1.34.

Item 10b. Electric Motors.--Report the total horsepower of all motors with a rating of one horsepower or more whether driven by purchased electricity or by electricity generated by you.

Item 11. Supplies Used and Minerals for Treatment in 1963.--This inquiry calls for a breakdown of the supplies used and ores and concentrates received for treatment at this establishment during 1963 reported in Item 5a of this form. Separate figures are required for each item listed. The total cost in Item 11 column E should agree with the total cost reported in Item 5a.

Column D.--Quantity.--Report the quantities actually used in terms of the unit of measure specified in column C. On line 1, report tonnage of crude material or concentrates treated, before removal of refuse and waste.

Column E.--Delivered Cost.--Report amounts actually paid or payable after discounts, and include freight and direct charges incurred in acquiring the quantities of the listed items during 1963. For supply items transferred from other establishments of this company, report values as described in Section D on page 2 of these Instructions. For crude minerals or concentrates transferred, report the value prior to treatment.

Column F.--Minerals from this Mine or Plant.--Include here only the material mined by the mine employees covered by this report or by open-pit contractors mining for your account (for which contract cost is included in Item 5e), and residues from this plant. Do not include in this column material received from other establishments of your company. Such material should be included in columns D and E.

Item 11b, Line 3. Explosive Materials.--Include only explosive material, such as powder. Exclude blasting accessories, such as safety fuse, detonator caps and detonating fuse; exclude breaking agents such as liquid oxygen and ammonium nitrate mixes. The value of such blasting accessories and breaking agents used should be included in Item 11b, Line 5 "All other supplies."

Item 11b, Line 4. Steel Mill Shapes and Forms.--If records for the tonnage of steel mill shapes and forms used are not available, an estimate is acceptable. For example, this figure may be estimated on the basis of the approximate tonnage of steel used per ton of ore produced.

Item 12A. Products and Services in 1963.--Report separately each product listed; do not combine product lines. Include all products of the establishment which were produced or physically shipped from the establishment during 1963, including material withdrawn from stockpiles. Include products shipped on consignment, whether or not sold at the end of 1963. Include all concentrates produced, whether from ores mined at the establishment, purchased, received from other plants of your company, or received for treatment on a custom or toll basis. Include the estimated value of products treated on a custom basis. Include as shipments material produced at this establishment and transferred for treatment or use by your company at other establishments, estimating its approximate value in the manner described in Section D on page 2 of these Instructions. Do not include as crude shipments any crude ore or materials mined at this establishment and also milled or otherwise prepared at this establishment.

For iron and manganese ores (Form MC-10A), report ore merely crushed or screened as direct-shipping ore, and exclude it under beneficiating grade ore and under treated ores. Treated iron and manganese ores for shipment to consumers should include fine-size treated ores to be agglomerated by consumer.

Report weights in the unit of measure specified. Long tons should represent 2,240 pounds; short tons should represent 2,000 pounds. Report total values f.o.b. this mine or treatment plant. Include in the selling value royalty, if any, but exclude transportation charges to the purchaser or user.

Bonuses and other credits for metals contained should be included in the value of shipments and interplant transfers. Penalties for impurities, such as arsenic, should be excluded from the value of shipments.

Items 12B-20. (See instructions on form.)

Item 21. Period of Report.--Enter the month and day of the beginning and the end of period your report covers. If a calendar year report: "From January 1 to December 31, 1963;" if a fiscal year, specify which (such as "From December 1, 1962 to November 30, 1963"). If a part-year report is submitted because the establishment was not in operation or under your company's control for the entire year, specify the actual period covered: For example, "January 1, 1963 to August 15, 1963" or "June 1 to December 31, 1963."

FORM MC-10S  
(1030)

U.S. DEPARTMENT OF COMMERCE  
BUREAU OF THE CENSUS

# 1963 CENSUS OF MINERAL INDUSTRIES

## METALLIC ORES

### PLEASE NOTE:

Complete this form and attach establishment's report. Return this form to **Jeffersonville Census Operations Office, Jeffersonville, Indiana**, on a flow basis but not later than July 24, 1964.

MC-10S (1030)

**CONFIDENTIAL**—Response to this inquiry is required by Act of Congress (13 U.S.C.). The report you submit to the Census Bureau is confidential and may be seen only by sworn Census employees. It must not be used for purposes of taxation, investigation, or regulation.

(Please correct if mailing address has changed)

### ITEM A—GENERAL INFORMATION

#### 1. NAME OF ESTABLISHMENT

#### 2. PHYSICAL LOCATION OF ESTABLISHMENT

a. State

b. County

c. Place

### ITEM F—TYPE OF OPERATION IN 1963

#### 1. Mining Methods

a. Open-pit or surface placer deposit

b. Underground (*Indicate dominant mining method*)

(1) Open-stopping (including room-and-pillar and sublevel stopping)

(2) Shrinkage stopping

(3) Square setting

(4) Cut-and-fill stopping

(5) Block caving

(6) Sublevel caving, top slicing, and other (*Specify*)

#### 2. Treatment Methods

a. No treatment

b. Flotation

c. Cyanidation and other (*Specify*)

3. If engaged only in development, exploration, or assessment work, state the mineral for which the work was undertaken.

Check

Code

620

631

632

633

634

635

639

Code

681

699

Check

Code

681

699

Check

Code

681

699

**THIS FORM IS NOT COMPLETE UNTIL THE  
ABOVE NAMED ESTABLISHMENT'S REPORT IS  
ATTACHED.**

Enter the quantity of products as specified in Column (B-2). Report the total selling value, f.o.b. mine or mill, of each kind of ore. Do not include charges for delivery, freight, etc. Estimates are acceptable whenever exact figures are not available.

Line number	8				8-1	Unit of measure (B-2)	Production (Quantity)	8-3		8-4*			
	Products and services (A)							Shipments and interplant transfers		Value f.o.b mine or mill (E)			
				Census product code (B-1)			Quantity (D)	Mil- lions 000	Thou- sands 000	Per ton			
1	PRODUCTS OF THIS ESTAB- LISHMENT	Iron	Crude ores	10111 01 16	Long ton						XX	XX	
2			Treated ores	10112 01 96							XX	XX	
3		Copper	Crude ores	10211 01 95							XX	XX	
4			Concentrates	10212 01 75							XX	XX	
5		Lead	Crude ores	10321 01 62							XX	XX	
6			Concentrates	10322 01 42							XX	XX	
7		Zinc	Crude ores	10331 01 50							XX	XX	
8			Concentrates	10332 01 30							XX	XX	
9		Lode gold	Crude ores	10421 01 41							XX	XX	
10			Mill bullion (metal contained)	10423 01 01							XX	XX	
11		Placer gold		10433 07 69	Fine ounce						XX	XX	
12			Crude ores	10441 01 27		Short ton						XX	XX
13		Lode silver	Crude ores	10443 01 87								XX	XX
14			Mill bullion (metal contained)	10443 07 57		Fine ounce						XX	XX
15		Placer silver	Bauxite	Crude (undried)	10511 01 22		Long ton						XX
16				Dried	10512 01 02							XX	XX
17				Calcined or activated	10512 03 62							XX	XX
18		Manganese	Crude ores	10621 01 99								XX	XX
19			Treated ores	10622 01 79									XX



[illegible]



**NAME AND ADDRESS**

**1963 SURVEY OF MINERAL INDUSTRIES  
METALLIC ORES**

**PLEASE NOTE:**

**Please read detailed instructions on reverse side.**  
The following information will be made available to the Bureau of the Census. That Bureau will accept this report as meeting your reporting requirements for the 1963 Census of Mineral Industries.

**Please complete and return this form to:**

*(Please correct if mailing address has changed)*

**ITEM A  
GENERAL  
INFORMATION**

**1. FORM OF OWNERSHIP OF YOUR COMPANY (Check one)**

- |  |  |
|--|--|
| <input type="checkbox"/> 1 Individual proprietor | <input type="checkbox"/> 8 Cooperative Association |
| <input type="checkbox"/> 2 Partnership           | <input type="checkbox"/> 9 Other (Specify) _____   |
| <input type="checkbox"/> 0 Corporation           |  |

**2. FEDERAL SOCIAL SECURITY IDENTIFICATION NUMBER.** (As shown on Employer's Quarterly Federal Tax Return, Treasury Form 941).

**ITEM B  
NUMBER OF  
PERSONS  
ENGAGED  
IN 1963**

- |   |                     |            |
|---|---------------------|------------|
| <b>1.</b> Number of proprietors and partners who regularly performed manual (production, development, or exploration) work at this operation in 1963. | <b>Total number</b> | <b>Key</b> |
|   |                     | <b>0-1</b> |
| <b>2.</b> Number of paid employees during the pay-period ended nearest March 15, 1963.<br>(Exclude proprietors and partners.)                         |                     | <b>0-2</b> |

**IMPORTANT:** Figures for dollars should be rounded to THOUSANDS. If you wish you may report to the nearest dollar. In either case, **please be careful to enter your figures in the CORRECT COLUMNS.**

**EXAMPLE:**  
If the payroll is \$1,125,628.28:

Preferred method →  
Acceptable method →

Mil- lions	Thou- sands	Dol- lars	Cents
000	000	000	XX
\$ 1	126		XX
\$ 1	125	628	XX

**ITEM C  
PAYROLLS  
IN 1963**

Salaries, wages, bonuses, commissions, and other remunerations paid in 1963, before deductions.  
(Exclude payments to proprietors and partners)

**TOTAL** → \$

Mil- lions	Thou- sands	Dol- lars	Cents	Key
000	000	000	XX	
			XX	<b>0-3</b>

**ITEM D  
SELECTED  
COSTS  
IN 1963**

**1.** Cost of supplies, minerals purchased for preparation, and purchased fuels and electric energy consumed in 1963. Include explosives, steel products, mine timbers and ties, etc. (Report new and used machinery on Line 4.)

\$			XX	<b>0-4</b>
----	--	--	----	------------

**2.** Cost of contract work done for you by others during 1963.

\$			XX	<b>0-5</b>
----	--	--	----	------------

**3. TOTAL COST, EXCLUDING MACHINERY** →  
(Sum of Lines 1 and 2)

\$			XX	<b>0-6</b>
----	--	--	----	------------

**4.** Cost of new and used machinery, equipment, parts, and used plant (not reported above) installed in 1963.

\$			XX	<b>0-7</b>
----	--	--	----	------------

**ITEM E  
CAPITAL  
EXPENDITURES  
IN 1963**

Cost of capitalized development, exploration, plant and other construction, machinery, and equipment installed in 1963. (Include both new and used plant and equipment. Exclude land and mineral rights.)

\$			XX	<b>0-8</b>
----	--	--	----	------------

**ITEM F  
SHIPMENTS**

**Total value, f.o.b. mine or mill, of all ores and concentrates shipped in 1963** → \$

\$			XX	
----	--	--	----	--

**ITEM G**

**PERIOD OF REPORT**

This report covers the period from \_\_\_\_\_ to \_\_\_\_\_

**ITEM H**

**CERTIFICATION**—This report is substantially accurate and has been prepared in accordance with instructions.

Signature of authorized person

Title

Date

## INSTRUCTIONS

**Item B—Number of Persons Engaged in 1963—**

Report on **Line 1** the number of proprietors and partners who regularly performed manual (production, development, or exploration) work at this operation in 1963. On **Line 2** report the total number of employees paid during the pay-period ended nearest March 15, 1963. If an unincorporated business, exclude proprietors and partners from this reported total, but include them on Line 1.

**Item C—Payrolls in 1963—**Report the total paid as salaries, wages, bonuses, commissions, and other remunerations during 1963. If an unincorporated business, exclude payments to proprietors or partners. The definition of salaries and wages used for calculating the withholding tax may be followed.

**Item D—Selected Costs in 1963—**Report on **Line 1** the cost of supplies, minerals purchased for preparation and purchased fuels and electric energy consumed

during 1963, which were used (a) directly to produce products; (b) as operating supplies; and (c) for exploration, development, repair, and maintenance. Report on **Line 2** the cost of stripping, drilling, and other services performed for you on contract by others. Report on **Line 4** the cost of all new and used machinery, equipment, parts, and used plant installed in 1963, which were not reported on Line 1.

**Item E—Capital Expenditures in 1963—**Include the portions of the costs reported in Items C and D, above, that were capitalized during 1963.

**Item F—Total Value of all ores and concentrates shipped in 1963—**Report the value of ores and concentrates as shipped from your mine or mill. Do not include transportation charges beyond the mine or mill. Do not include milling or smelting charges for work performed at other establishments.

## REMARKS

**CONFIDENTIAL**—Response to this inquiry is required by Act of Congress (13 U.S.C.). The report you submit to the Census Bureau is confidential and may be seen only by sworn Census employees. It may not be used for purposes of taxation, investigation, or regulation. Copies retained in your files are also immune from legal process.

# 1963 CENSUS OF MINERAL INDUSTRIES

COAL

MC-12A (1201)

## NOTE:

Census Bureau reviews your report for omissions, inconsistencies, and unusual ratios. Incomplete and inaccurate answers will result in correspondence which is both costly and consuming.

Work records are not available, reasonably accurate estimates for most items are acceptable for the statistical purposes of this survey.

A separate report is required from the operator for each underground mine, strip-pit, mine, culm bank, dredge, or separately operated preparation plant.

The complete and return this form in the envelope provided to the **Jeffersonville Census Operations Office, Jeffersonville, Indiana**. If filing by due date causes an undue burden, a request for extension should be directed to that office.

## PLEASE READ INSTRUCTIONS BEFORE COMPLETING REPORT

**INSTRUCTIONS:** Figures for dollars, man-hours, and KWH are rounded to THOUSANDS. If you wish you may round to the nearest unit. In either case, please be sure to enter your figures in the CORRECT column.

Millions	Thousands	Tens	Cents
000	000	000	XX
\$ 1	126	000	XX
\$ 1	125	000	XX

## GENERAL INFORMATION

### NAME OF ESTABLISHMENT

**PHYSICAL LOCATION OF ESTABLISHMENT**  
December 31, 1963. (Your answers to this question should relate to the ACTUAL PHYSICAL LOCATION of this establishment which may be different from the mailing address.)

and number at establishment location \*

\*Establishment location cannot be described by street and give name (and number, if any) of road or and sufficient information to locate establishment.  
225, 3 miles south of Charleville.

In correspondence pertaining to this report please refer to the 11-digit file number in the box above your name.



**KEEP THIS COPY FOR YOUR FILES**

**PLEASE COMPLETE AND RETURN THE FORM WHICH SHOWS YOUR NAME AND ADDRESS**

(Please correct if mailing address has changed)

COMPLETE EVERY ITEM (Enter "0" where appropriate)		1963			Key
<b>ITEM 2A NUMBER OF EMPLOYEES IN 1963</b>	a. Number of production, development, and exploration workers during pay period ended nearest 15th of—	(1) March			0-1
		(2) May			0-2
		(3) August			0-3
		(4) November			0-4
b. Sum of Lines (1) through (4)					0-5
c. Average number (divide sum on Line b by 4)					0-6
d. All other employees, March 15th					0-7
e. TOTAL NUMBER OF EMPLOYEES (Sum of Lines c and d)		→			0-8
a. Total number of proprietors and firm members (not applicable to corporations)					3-1
b. Number of proprietors and firm members (included in Line a above) regularly performing production, development, or exploration work at this establishment					3-2
a. Production, development, and exploration worker wages		Millions	Thous.	Dols Cents	1-1
b. All other employee salaries and wages		\$			1-2
c. TOTAL PAYROLL (Sum of Lines a and b)		\$			1-3*
<b>ITEM 4 MAN-HOURS OF PRODUCTION, DEVELOPMENT, AND EXPLORATION WORKERS BY DEPARTMENT IN 1963</b>	a. At mine	Millions	Thous.	Hours	XX
	(1) Underground (mining and development)				3-3
	(2) Strip-pit, auger, culm bank, and dredge				3-4
	(3) Surface (including mine shops and yards)				3-5
b. At preparation plant (including auxiliary works for this plant)					3-6
c. TOTAL PRODUCTION, DEVELOPMENT, AND EXPLORATION WORKER MAN-HOURS (Sum of lines a and b)		→			3-7
d. Man-hours included above which were spent on exploration and development					3-8

**A-17**

Description A	Line No. B	Census material code B	Unit of measure C	7-1		7-2		7-3X		Quantity of raw coal from this mine F
				Census material code B	Unit of measure C	Quantity D	Received from other establishments of this company, purchased from others, and coal received for custom preparation E	Delivered cost E		
									Quantity D	
Raw coal mechanically cleaned by wet-washing or pneumatic methods (Enter cleaned product in Item 12A, Line 3)	1	1211 91 1	Short ton							
Raw coal prepared only by other methods such as mechanical crushing, screening, or sizing (Exclude coal reported in Line 1 above. Enter prepared product in Item 12A, Line 4)	2	1211 93 7	Short ton							
Explosive materials (exclude blasting accessories and breaking agents)	3	2892 00 8	Pound							
Steel mill shapes and forms (such as rails, wheels, track accessories, roof bolts, plates, pipe, tubing, piling, drill steel bars, other bars, sheets, strip, wire, wire products, and structural shapes)	4	3312 01 4	Short ton							
Round or hewn woods products and stumpage (such as logs, bolts, hewn cross ties, hewn or round mine timbers and ties)	5	2411 00 7								
All other supplies (such as blasting accessories and breaking agents, forgings and castings, drill bits, other tools and parts, and lubricating and treating oils) (Exclude purchased machinery which should be reported in Item 5g)	6	9700 99 8								
<b>TOTAL COST (Sum of Lines 1 through 6; should be the same as Item 5a)</b>	7									
The Bureau of Mines (U.S. Department of the Interior) collects detailed figures on coal. This item and Item 12C provide summary figures which will serve to relate the statistics compiled from the Census of Mineral Industries to the statistics compiled from Bureau of Mines surveys. For comparable items the same data should be reported both to the Bureau of Mines and the Bureau of the Census.										
Description A	Line No. B	Census product code B-1	Quantity (Short tons) D	8-3		8-4				
				Shipments and interplant transfers Value f.o.b. this establishment E	Value f.o.b. this establishment E					
						Shipments and interplant transfers Value f.o.b. this establishment E	Value f.o.b. this establishment E			
Raw coal (Report only coal mined at this establishment; include hand-picked and hand-screened coal) Shipments to coal preparation plants (If coal was sold on a clean-coal basis, report total tonnage prior to allowance for refuse and waste. Enter name and location of plant or plants at which coal was prepared in Item 19 of this report)	1	12111 03 52								
All other shipments	2	12111 01 92								
Prepared coal (Report all coal prepared at this establishment; include coal prepared on a custom basis for others) Mechanically cleaned by wet-washing or pneumatic methods	3	12112 01 72								
Other preparation only, such as crushing, screening, or sizing	4	12112 03 32								
Other products of this establishment (Specify kind and unit of measure if not short tons) Clay	5	14590 01 27								
Other (Specify kind and unit)	6									
Amounts received for other establishments (such as hauling, stripping, shaft sinking, pumping, and shop work—de amounts received for custom preparation of coal)	7	12808 01 07								
Less—Coal purchased and resold without further processing	8	99989 05 56								
<b>TOTAL VALUE (Sum of Lines 1 through 8)</b>	9	77000 00 88								
							9-2			
							9-1			
							Code			
							Millions Thous. Dollars			
							911			
							Millions Thous. Dollars			
							XX			

Amount received or due for custom preparation of coal. (The shipments of such coal should be included in Item 12A, Lines 3 and 4.)

a. Report net marketable coal produced from this mine in 1963, excluding washery and other refuse. Include coal mined for you by contractor at strip pits, auger mines, or culm banks (report contract cost in Item 5e) exclude coal purchased for preparation or resale. Report in short tons of 2,000 pounds.

9-1		9-2		Strip-pit		Coal mined, by type of mining	
Census code A		Total coal mined, all types B		Mined by your own employees 9-3		Auger, culm-bank, or dredge	
				Mined by outside contractor 9-4		Mined by your own employees 9-6	
						Mined by outside contractor 9-7	
880						G	

b. Proportion of net coal production (Item 12C, a, Column B) which was used by your company in this or other establishments for power, heat, or as a material for manufactured products.

1	<input type="checkbox"/> 100 percent	2	<input type="checkbox"/> 90-99 percent	3	<input type="checkbox"/> 50-89 percent	4	<input type="checkbox"/> 10-49 percent	5	<input type="checkbox"/> Less than 10 percent
---	--------------------------------------	---	--	---	--	---	--	---	---

9-1		882		9-2		9-3		9-4		9-5		9-6		9-7		9-8		9-9		9-10		9-11		9-12		9-13		9-14		9-15		9-16		9-17		9-18		9-19		9-20		9-21		9-22		9-23		9-24		9-25		9-26		9-27		9-28		9-29		9-30		9-31		9-32		9-33		9-34		9-35		9-36		9-37		9-38		9-39		9-40		9-41		9-42		9-43		9-44		9-45		9-46		9-47		9-48		9-49		9-50		9-51		9-52		9-53		9-54		9-55		9-56		9-57		9-58		9-59		9-60		9-61		9-62		9-63		9-64		9-65		9-66		9-67		9-68		9-69		9-70		9-71		9-72		9-73		9-74		9-75		9-76		9-77		9-78		9-79		9-80		9-81		9-82		9-83		9-84		9-85		9-86		9-87		9-88		9-89		9-90		9-91		9-92		9-93		9-94		9-95		9-96		9-97		9-98		9-99		1000	
-----	--	-----	--	-----	--	-----	--	-----	--	-----	--	-----	--	-----	--	-----	--	-----	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--

a. Mining methods (Check one or more)

(1) Strip-pit	(2) Underground	(3) Auger	(4) Culm bank	(5) Dredge
620	630	621	622	623
<input type="checkbox"/> 8-2	<input type="checkbox"/> 8-3	<input type="checkbox"/> 8-4	<input type="checkbox"/> 8-5	<input type="checkbox"/> 8-6

b. Preparation method (Check one or more)

(1) No preparation except hand-picking or hand-screening	(2) Mechanical cleaning (wet-washing or pneumatic)	(3) Mechanical crushing	(4) Mechanical screening and sizing	(5) Other preparation (Specify)
<input type="checkbox"/> 685	<input type="checkbox"/> 686	<input type="checkbox"/> 687	<input type="checkbox"/> 688	<input type="checkbox"/> 689

c. Contract stripping, auger mining, and culm bank loading

If strip pit, auger mine, or culm bank, was any coal mined at the operation by contractors hired by you? (Do not include as contractors suppliers who mine coal property owned or leased by them or on which they pay royalties). (Check one box only)

Yes	No
-----	----

Number of production, development, and exploration workers in pay period ended nearest 15th of each month in 1963 (Figures for March, May, August, and November should be the same as Item 2A, Lines (1) through (4))

9-1	9-2	9-3	9-4	9-5	9-6	9-7
722	January	February	March	April	May	June
733	July	August	September	October	November	December

Not applicable to this form

The Census Bureau reviews your report for omissions, inconsistencies, and unusual ratios. To save you future correspondence about these problems, please make the following checks before returning your report:

- Review the report carefully to see that no items are omitted for the year being covered.
- Calculate the four "reasonableness" checks described below, entering the figures for each, and review the results.
- Correct your report for any errors you find; explain unusual figures in "Remarks" section.

"Reasonableness" check		Calculation required for each check		Resulting figures for 1963	
(1) Average hourly wages per production worker	Item 3a (Production worker wages) ÷ Item 4c (Man-hours of production workers)			\$	
(2) Hours worked per year per production worker	Item 4c (Man-hours of production workers) × 1,000 ÷ Item 2Ac (Average number of production workers)			Hrs.	
(3) Salaries and wages per dollar of shipments and receipts	Item 3c (Total payroll) ÷ Item 12Ad (Total value of shipments and receipts)			¢	
(4) Supplies, etc., cost per dollar of shipments and receipts	Item 5f (Total supplies, etc. cost) ÷ Item 12Ad (Total value of shipments and receipts)			¢	

REMARKS—Please use another sheet of paper and attach to this report.

Name of person to be contacted regarding this report. Address Telephone No.

CERTIFICATION—This report is substantially accurate and has been prepared in accordance with instructions.

PERIOD OF REPORT

This report covers the period—

From To Title Date



# 1963 CENSUS OF MINERAL INDUSTRIES

## REPORTING INSTRUCTIONS FOR COAL MINING

Form MC-12A.

*In all correspondence with the Census Bureau, please include the 11-digit file number which appears in the address box of the report form. High-speed electronic equipment will be used to identify both the correspondence and the reports in the 1963 Economic Censuses. If your correspondence does not include the Census file number, it will be returned for the addition of that number. Address all correspondence to JEFFERSONVILLE CENSUS OPERATIONS OFFICE, 1201 East 10th Street, Jeffersonville, Indiana.*

*Please do not mark or mar the two lines of symbols above the address on each form. These symbols or rectangles, which are unique to each establishment, will be photographed and used to record mechanically the receipt of your report form.*

*As you complete the report for each establishment, please enter the 11-digit file number at the top of the odd-numbered pages as requested.*

This booklet is provided to assist you in filling out the enclosed Census of Mineral Industries form MC-12A. Please read these instructions and those appearing on the individual report form for each item before entering your figures.

### A. Who Should Report?

The Census of Mineral Industries reports are required by an Act of Congress (13 U.S.C.). The reports submitted are confidential and may be seen only by sworn Census employees. They may not be used for purposes of taxation, investigation, or regulation. Copies retained in your files are also immune from legal process.

Every concern is required to submit a separate Census report for each of its mineral establishments in the United States, including mines under development and preparation plants or tipples under construction. Enterprises with more than one establishment must submit a separate report for each establishment operated during all or any part of 1963. Reports should be returned to the Jeffersonville Census Operations Office as shown on the enclosed envelope.

Each report should be submitted by the operator of the establishment, whether he is the owner or is operating it under lease or contract.

Based on Census Bureau records, a report form is provided for each establishment which your company operated in 1963. If you have not received sufficient forms to cover all the mineral establishments operated by your company, write for additional copies. Be sure to describe the type of activity carried on at the establishments for which you request additional forms.

#### 1. What Is a Mineral Establishment?

For purposes of the Census, a mineral establishment is defined as a single physical location where mineral operations are conducted; for example, a mine only (a mine may be an underground, strip-pit, auger, culm-bank, or dredge operation), a mine and preparation plant, or a preparation plant only. Since the information reported will be summarized to totals for each industry, State, and county, separate reports are required for different physical locations even though the establishments may be engaged in the same type of mining.

Thus, a mineral establishment represents a working or group of workings at a given locality in which operations are conducted as a unit or are unified by common management or joint handling of some part of the mining or preparation process. Individual shafts, openings, or sites should not necessarily be considered as individual mines; strip-pit or auger mines and culm banks, however, should be reported separately from underground mines wherever possible. Plants engaged solely in preparing coal mined at other locations should be reported separately.

In completing your reports, a limited amount of prorating or estimating is acceptable when book records are not readily available.

### 2. How To Report for Establishments With No Production During 1963

If any of your company's mining establishments had no production at all during 1963, you should nevertheless return the report for each such establishment with all other information completed and with "None" entered in Item 12. If a mining location was not in production, but had custodial employees, maintained inventories, or made shipments during the year, the information should be reported in the appropriate section of the report form. The Census includes sites under exploration, mines under development or maintenance only, and plants under construction.

### B. What Activities Should Be Reported?

Each report should cover the operations of a mine—underground, strip-pit, auger, culm bank, or dredge—together with its associated tipple, shops, auxiliary units, yards, cleaning plant, breaker, washery, or other preparation plant; and offices; or it should cover a preparation plant not at the site of the mines served, or operated under separate management from the mines, together with its associated shops, yards, auxiliary units, and offices. The report should also include such activities as generating energy for the mine or plant (a central power plant serving two or more mineral establishments should be included in the report for that establishment to which the power plant furnishes the greatest quantity of electric energy); maintenance of mine, plant, and equipment; and receiving, shipping, storage, research, record keeping, health, safety, cafeteria, and other services, when carried on at the same physical location by the mineral establishment.

The report should exclude the operation of company stores, boarding houses, bunk houses, and recreational facilities. The report should also exclude sales branches, research laboratories, and general administrative offices, if they were operated as separate establishments. Such operations should be reported, where applicable, on separate Census of Business, Census of Manufactures, or central office or auxiliary forms available for such establishments.

The report should not include the production of coal chemicals, coke, fuel briquets, or packaged fuel. Such operations should be reported on Census of Manufactures forms.

### C. What Period Should Each Report Cover?

Each report should cover the calendar year 1963. If your book records are not on a calendar year basis, carefully prepared estimates will be acceptable. If reporting on a calendar year basis will involve considerable additional costs, and your fiscal year covers at least 10 months of calendar year 1963 (i.e., ends between October 31, 1963 and February 29,

ment, payroll, and man-hour figures should relate to the calendar year rather than the fiscal year. (These calendar year payroll records should be available from your tax records.)

In the certification, the dates should show the exact period which the report covers. Thus, if an establishment began to operate or ceased to operate within the year, the dates should span only that part of the year during which the plant was in operation. If the ownership changed during the year, complete the report only for that part of 1963 in which your company owned and operated the establishment. Report in Item 13 the appropriate information on changes in ownership or operations.

**D. How Should Multiple Establishment Companies Determine Transfer Values of Products and Materials From One Establishment to Another ("Interplant Transfers")?**

One of the important statistical measures of mining activity is "value added by mining," which is derived by the Census Bureau from the figures reported for value of shipments; capital expenditures; and cost of supplies, purchased fuels and electric energy, contract work, and purchased machinery installed during the year.

In order for statistics on value added and other subjects to be comparable from industry to industry or area to area, it is necessary that the operations of each establishment of a multiple establishment organization be reported as though the establishment were a separate "economic" unit. This means that the value of interplant transfers within a company should include, in addition to direct costs of production, a reasonable proportion of "all other costs (company overhead) and profits." The establishments receiving such transfers should report them as purchased coal for preparation, supplies, fuels, or electric energy at the same value plus costs of freight and other direct handling charges. (See Item 5.)

**ITEMS ON THE REPORT FORM**

**Item 1.** (See instructions on Form.)

**Item 2A.** Number of employees.—(You may follow the definition of employees specified by your State Employment Security Agency.)—Report part-time and full-time employees at the establishment who worked or received pay for any part of the pay period (preferably one week) ending nearest the 15th of the specified months (i.e., March, May, August, and November of 1963 for "production, development, and exploration workers" and March only for "all other employees").

Include all persons on paid sick leave, paid holidays, and paid vacation during these pay periods; exclude members of armed forces and pensioners carried on your active rolls. Include officers at this establishment, if a corporation; if an unincorporated concern, exclude proprietor or partners. Exclude workers at coke ovens, fuel briquet plants, and other manufacturing plants, company stores, boarding houses, bunk houses, and recreational centers.

**Item 2A, lines b and c.**—Divide the total on Line b by FOUR and enter the result on Line c; divide by FOUR even if the establishment did not operate in all four periods.

**Item 3.** Payrolls.—(You should follow the definition of salaries and wages that is used for calculating the withholding tax.) Report the gross earnings paid in calendar year 1963 to employees on the payroll at the establishment prior to such deductions as employee's Social Security contributions, withholding taxes, group insurance premiums, union dues, and savings bonds. Include in gross earnings commissions, dismissal pay, pay bonuses, vacation and sick-leave pay, and the cash equivalent of compensation paid in kind, such as board and housing. Include salaries of officers of this establishment, if a corporation; if an unincorporated concern, exclude payments to proprietor or partners. Exclude payments to members of armed forces, and pensioners carried on your active payroll.

Exclude here, but include in Item 5a, the cost of smelting, explosives, fuses, electric cap lamps, and mine supplies used in production, development, and exploration work but charged to employees and deducted from their wages.

production, development, and exploration workers, by Departments.—The man-hour figures are designed to measure the over-all activity of the establishment during the year on both active and inactive days. The figures should represent all man-hours worked or paid for, except hours for paid vacations, holidays, or sick leave, when the employee was not at the establishment. If an employee elects to work during the vacation period, report only actual hours worked by such employee. Overtime hours should be reported as actual hours worked, not straight-time equivalent hours.

The figures should account for all man-hours worked at this establishment for the entire year by all full-time and part-time production, development, and exploration workers reported in Item 2A. Exclude hours worked by employees of contractors or by proprietors, partners, or firm members.

**Item 5.** Cost of Supplies, Coal Received for Preparation, Fuels, Electricity, Contract Work, and Machinery.—The entries in this item are used by the Census Bureau to calculate the 1963 value added by mining. The figures reported should represent the total purchase cost of supplies, coal received for preparation, fuels, etc., actually used or processed during 1963. Include items charged to both the current and capital accounts.

Include items consumed by the establishment during the year although purchased prior to 1963; coal received from other mines for preparation (this should also be reported separately in Item 11), purchased supplies consumed for production, development, exploration, maintenance, and repair of mine, plant, and equipment, and in plant construction; supplies which you furnished without charge to contractors or sold to employees for use at this establishment; consumption of items received from other establishments of your company for which separate reports are being submitted.

Exclude items received during the year which were not consumed; services such as advertising, telephone, telegraph, cable, insurance, development, and research rendered by other establishments to this establishment, or services of engineering, management, marketing, legal, and other professional consultants, etc.; expenses such as depreciation and depletion charges against plant and equipment, rent and rental allowances, interest payments, royalties, and use of patent fees; supplies (such as timber or lumber), parts, or machinery produced at this establishment; extraordinary losses such as by fire and flood; and wages of your employees engaged in maintenance and repair work (these should be reported in Item 3).

If your records do not show the amounts actually consumed or processed during 1963, the figures to report may be derived from purchase and other records. Cost of purchases may be used if these do not differ significantly from the amounts actually used. However, if consumption of any major item differs significantly from purchases, the amount used may be estimated by adding beginning-of-year inventories to the amounts purchased and subtracting from this total the cost of supplies on hand at the end of the year.

Cost is delivered cost and should be the amount actually paid or payable after discounts and should include freight and other direct charges incurred by the establishment in acquiring supplies consumed. The cost figures for consumption should represent receipts from all sources, i.e., amounts purchased from other establishments, withdrawn from inventories, or obtained from other establishments of the same company. However, if coal was mined at this establishment in 1963 and also prepared at this establishment, the value of the raw coal before preparation should not be included in the value figures reported.

For supplies, coal for preparation, fuels, and electric energy received from other establishments of your company, cost should be checked against the values reported for the establishment producing and transferring the supply (see Section D above). Freight and other direct handling charges should be added.

**Item 5a.** Cost of Supplies Used and Coal Received for Preparation.—The following list of examples of supplies will indicate the types of items which should be included. The



a complete list of the items which should be included.

Bearings	Hardware
Bolts, screws, and nuts	Headlights and lamps
Brake blocks and linings	Industrial diamonds
Belting and screen cloth	Jacks
Carbon and graphite brushes	Lubricating oils
Cement	Lumber and timber purchased
Chemical reagents	Picks
Coal spraying oils	Pipe and fittings
Dies, jigs, and fixtures	Piling
Drill bits and accessories	Plates and sheets
Explosives	Rail and accessories
First aid and safety supplies	Rods and bars
Floor gratings	Roof bolts
Forgings and castings	Stationery, stamps, and office supplies
Fuses	Track accessories
Grinding balls and rods	Water purchased
Gears and pinions	Welding rods, electrodes, and acetylene
Hammers	Wire, cable, and chain
Hand tools	

Include only physical goods used or put into production. Exclude services used or overhead charges. The cost of services performed for you by others should be reported in Item 5e.

Item 5b. Cost of Coal Bought and Resold Without Further Processing.—Report the cost of all coal bought and resold in the same condition as when purchased. (Total quantity and resale value of such coal is to be reported in Item 12Ac).

Item 5c. Purchased Fuels Consumed.—Report the total amount actually paid or payable during 1963 for all purchased fuels consumed for heat, power, or the generation of electricity. Include anthracite and bituminous coal, coke, natural and manufactured gas, fuel oil, liquefied petroleum gas, gasoline, wood, and all other fuels, including purchased steam. Coal produced and used at this establishment for heat, power, or the generation of electricity should not be included here but should be reported in Item 9b.

Item 5d. Purchased Electricity.—Report the total amount actually paid or payable for electric energy purchased during 1963 from other companies, or received from other establishments of your company. Exclude the value of electricity generated and used at this establishment.

Item 5e. Cost of Contract Work Done for You by Others.—Report the total payments made for contract services performed during 1963, including payments for supplies and equipment furnished by the contractor incidental to this work.

Exclude payments to miners on your payroll but paid on a per ton, car, yard, or footage basis. The compensation of such workers should be included in Item 3.

If part of the payment to a contractor was in material produced, an estimate of the value of the service should be reported.

Include payments to contractors who stripped or auger-mined coal or loaded culm-bank material for your account.

Exclude payments to suppliers who mined for their own account on property owned or leased by them and who paid royalties either directly or indirectly on the coal mined. Such payments to suppliers should be reported in Item 5b, if the coal was bought for resale without further processing or in Item 11a, if the coal was purchased for preparation at this establishment.

Item 5g. Purchased Machinery Installed.—Include all machinery, equipment, parts for renewals and repairs, and used plant which were purchased, or which were received from other establishments of your company. Include equipment which was installed in the mine or preparation plant as well as mobile loading and transportation equipment in 1963.

Item 6. Capital Expenditures for This Establishment (Exclude Expenditures for Land and Mineral Rights).—Capital ex-

penditures for exploration work, development work, and additions completed during the year, plus work-in-progress at the end of the year, minus work-in-progress at the beginning of the year. Labor and installation costs should be included whether on contract or by your own forces.

Item 6a. Development and Exploration of Mineral Property.—Report development and exploration outlays which were charged to a capital account. These should include charges to fixed assets for which depreciation or depletion accounts are ordinarily maintained for tax purposes. Include capitalized expenditures for new entries and shafts, construction of rail and other roads, test boring, surveying, overburden stripping, and the like.

Item 6b. Preparation Plant Construction and Other Construction.—Include expenditures for new construction, major additions, and alterations (including improvements and capitalized repairs). Include machinery which is an integral part of a building, such as a hoist, crusher, separator, or drier. Include, where capitalized, expenditures for construction by your own employees. Exclude construction of company houses, general recreation facilities, and rail and other roads.

Item 6c. New Machinery and New Equipment.—Report total expenditures at this establishment for new machinery and equipment capitalized during 1963. Include replacements as well as additions to capacity. Include the value of improvements and capitalized repairs to machinery and equipment transferred from other establishments of this company. Include the value of equipment produced and used at this establishment. Include all new mining, loading, transportation, and similar equipment for use at mines; preparation plant equipment which is not an integral part of a building; as well as new office machines and fixtures, furniture, cafeteria and change-room furnishings, automobiles, trucks, and similar equipment.

Item 6d. Used Plant and Used Equipment Acquired From Others.—Report total expenditures at this establishment for old or existing plants and for secondhand equipment acquired from others (including the U.S. Government). Include at approximate market value machinery or equipment transferred from other plants of your company.

Item 7. Quantity of Electricity.—All quantities for electricity preferably should be reported in thousands of kilowatt hours. Please be careful to enter your figures in the CORRECT COLUMNS.

Item 7a. Purchased Electricity.—Report the quantity for which cost is reported in Item 5d.

Item 7b. Generated Electricity.—Enter the total quantity of electric energy generated at this establishment (gross less generating station use) during 1963.

When totals are reported on this line, data relating to the activity of the power stations would also be included in other sections of this report. For example, the number of employees assigned to the power station, and their wages and man-hours, should be included in the figures reported in Items 2, 3, and 4; the cost of purchased fuels used to generate electricity, in Items 5c and 9; and the horsepower of prime movers driving generators, in Item 10.

Item 7c. Electricity Sold or Transferred.—Enter the quantity of electric energy, which was also included in Items 7a and 7b, but which was sold to other companies or transferred to other establishments of your company.

Item 8. Water Intake in 1963.—If you do not have exact records of the total quantity of water intake at this establishment, estimate the amount on the basis of the approximate number of gallons for a typical working day and the number of days which your establishment was operated during 1963. Include only primary intake from natural sources; do not include recirculation.

Item 9. Fuels Consumed in 1963.—Report only fuels used at this establishment for power or heat. Do not include here coal received for preparation (see Items 5a and 11) or for resale (see Item 5b). The total cost in Item 9 should agree with Item 5c.

your company and used at this establishment for power or heat.  
If your gas is billed in therms, convert as follows:

For natural gas: 1,000 therms equal 1 cubic foot.

For manufactured gas: 600 therms equal 1 cubic foot.

Item 9a(4). Gasoline.—Include gasoline used in automotive equipment such as reported in Item 10.

Item 9b. Coal Produced and Used.—Report the tonnage of coal that was produced at this establishment and used for power or heat.

Item 10. Horsepower Rating of Power Equipment.—Report the total horsepower rating (as indicated on nameplates) of all stationary and mobile equipment in use or available for use at the end of 1963. If more than one rating is shown, report brake horsepower, if available.

Include all owned, leased, or rented equipment in use, held for emergency or standby use or temporarily idle (awaiting repairs, installation, etc.) at the mine or plant. Exclude junk.

If book or other records are not available, reasonable estimates are acceptable.

Item 10a. Internal Combustion Engines and Other Prime Movers.—Include all engines and turbines, such as steam engines and turbines, internal-combustion engines (Diesel, gas, gasoline, etc.), hydroturbines, water wheels, and other prime movers. Include equipment driven by storage batteries. Report the total horsepower of your equipment; do not report the number of engines or motors.

Item 10a(1). In Highway-type Equipment.—Report on this line only horsepower for transportation equipment that was licensed for highway operation in the sense that you had purchased license plates or tags for the equipment. All non-licensed equipment of similar types should be included in Item 10a(2).

Item 10a(2)(a). Driving Generators.—Report on this line only equipment for producing your own electricity. The electricity generated by this equipment should be reported in Item 7b. Do not include rectifiers converting purchased alternating current to direct current.

If equipment is rated only on the generator, compute the prime mover horsepower by multiplying the kilowatt rating (kw) by 1.34.

Item 10b. Electric Motors.—Report the total horsepower of all motors with a rating of one horsepower or more whether driven by purchased electricity or by electricity generated by you.

Item 11. Supplies Used and Coal for Preparation in 1963.—This inquiry calls for a breakdown of the supplies used and coal received for preparation at this establishment during 1963 reported in Item 5a of this form. Separate figures are required for each item listed. The total cost in Item 11, column E, should agree with the total cost reported in Item 5a.

Column D. Quantity.—Report the quantities actually used in terms of the unit of measure specified in column C. On lines 1 and 2, report tonnage of raw coal for preparation, before removal of refuse and waste.

Column E. Delivered Cost.—Report amounts actually paid or payable after discounts, and include freight and direct charges incurred in acquiring the quantities of the listed items during 1963. For supply items transferred from other establishments of this company, report values as described in Section D on page 2 of these instructions. For raw coal transferred, report the value prior to preparation.

Column F. Raw Coal From This Mine.—Include here only the raw coal mined by the mine employees covered by this report or by strip-pit, auger, or culm-bank contractors mining for your account, for which contract cost is reported in Item 5e and net production is reported in Item 12C. Do not include in this column the coal received from other establishments of your company. Such coal should be included in columns D and E.

Item 11b, line 3. Explosive Materials.—Include only explosive material, such as powder. Exclude blasting accessories, such as safety fuse, detonator caps, and detonating fuse; exclude

mixes. The value of such blasting accessories and breaking agents used should be included in Item 11b, line 6 "All other supplies."

Item 11b, line 4. Steel Mill Shapes and Forms.—If records for the tonnage of steel mill shapes and forms used are not available, an estimate is acceptable. For example, this figure may be estimated on the basis of the approximate tonnage of steel used per ton of ore produced.

Item 12A. Products and Services in 1963.—Report separately each product listed; do not combine lines. Include all products of this establishment in 1963. Include products shipped on consignment, whether or not sold at the end of 1963. Include products transferred to other establishments of your company (such as to cleaning plants at other locations, coke ovens at this or other locations, other manufacturing establishments, or separate sales branches). Report all coal in short tons of 2,000 pounds. Report the net total values f.o.b. this establishment. Include in the selling value royalty, if any, but exclude freight or trucking charges to the purchaser or user.

Item 12Aa. Products Shipped (lines 1-4).—Do not include as shipments coal which was produced at this mine or plant and used at this establishment for power or heat. Such coal should be reported in Item 9b. Include as a shipment, however, coal produced at this mine or plant and used by your company at power plants not operated in conjunction with this establishment. Also, include as a shipment all coal transferred to other establishments such as coke ovens or other manufacturing plants, estimating its value, if necessary, in the manner described in Section D on page 2 of these instructions.

Do not include as shipments the raw coal prepared at this establishment; include as shipments only the clean coal recovered from such raw coal.

If raw coal was sold or transferred to another establishment for preparation, report on line 1 the total tonnage of raw coal before allowance for refuse and waste. Do not include under "Prepared coal" on lines 3 or 4 the clean coal recovered from this raw coal at the other establishment.

On lines 1 and 2, include only coal mined at this establishment. On lines 3 and 4, include all coal which was prepared at this establishment but do not include any coal purchased and resold without any further processing. The quantity and value of such resales should be reported on line 8.

Item 12C. Net Production of Coal in 1963, by Type of Mining.—If your establishment report covers a producing mine (underground, strip-pit, auger, culm bank, or dredge), report the net marketable coal produced from the mine in 1963, excluding washery and other refuse. Include coal produced at this establishment and used for power or heat. Include coal mined for your account by strip-pit, auger, or culm-bank contractors, but do not include as production from this mine underground coal mined by other than your own employees. Any underground coal mined at this location by other companies or their employees should be reported in Items 5, 11 and 12A as coal purchased for preparation or for resale without further processing.

The quantity of net marketable coal from this mine may be equal to but never greater than the quantity of coal shipped from this establishment plus coal used for power or heat, except insofar as there are differences due to changes in stocks. On the other hand, the quantity of coal shipped, plus that used at the mine or plant, may be greater than the net coal mined if (1) Raw coal was sold or transferred for cleaning at other establishments, or (2) Raw coal from other mines was prepared at this establishment.

Items 13-20 (See instructions on form.)

Item 21. Period of Report.—Enter the month and day of the beginning and the end of period your report covers. If a calendar year report: "From January 1 to December 31, 1963;" if a fiscal year, specify which (such as "From December 1, 1962 to November 30, 1963")." If a part-year report is submitted because the establishment was not in operation or under your company's control for the entire year, specify the actual period covered: For example, "January 1, 1963 to August 15, 1963" or "June 1 to December 31, 1963."

# 1963 CENSUS OF MINERAL INDUSTRIES

## CRUDE PETROLEUM AND NATURAL GAS

### NOTE:

The Census Bureau reviews your report for omissions, inconsistencies, and unusual ratios. Complete and inaccurate answers will result in correspondence which is both costly and time consuming.

Book records are not available, reasonably accurate estimates for most items are acceptable for the statistical purposes of this survey.

A separate report is required for each State (including offshore operations) or for each district in Texas, Louisiana, and New Mexico, in which you operated or drilled oil or gas or performed exploration work for oil or gas. The report should be on a gross basis for all leases operated by you, but should exclude your interest in leases operated by others.

Oil and gas field services performed for others (on a contract, fee, or other basis) in the State or district should be included.

Complete and return this form in the envelope provided to the **Jeffersonville Census Operations Office, Jeffersonville, Indiana**. If filing by due date causes an undue delay, a request for extension should be directed to that office.

### PLEASE READ INSTRUCTIONS BEFORE COMPLETING REPORT

**INSTRUCTIONS:** Figures for dollars, man-hours, and KWH should be rounded to THOUSANDS. If you wish you may round to the nearest unit. In either case, please be sure to enter your figures in the CORRECT column.

	Millions	Thousands	Dollars	Cents
Payroll is \$628.28:	000	000	000	XX
Round method →	\$ 1	126		XX
Round method →	\$ 1	125	68	XX

### 1. GENERAL INFORMATION

NAME AND ADDRESS OF OPERATING COMPANY

State

Address (street and number)

State

**CONFIDENTIAL**—Response to this inquiry is required by Act of Congress (13 U.S.C.). The report you submit to the Census Bureau is confidential and may be seen only by sworn Census employees. It may not be used for purposes of taxation, investigation, or regulation. Copies retained in your files are also immune from legal process.

In correspondence pertaining to this report please refer to the 11-digit file number in the box above your name.

MC-13A (1301)

(Please correct if mailing address has changed.)

COMPLETE EVERY ITEM (Enter "0" where appropriate)		1963		Key
ITEM 2A NUMBER OF EMPLOYEES IN 1963	a. Number of production, development, and exploration workers during pay period ended nearest 15th of—	(1) March		0-1
		(2) May		0-2
		(3) August		0-3
		(4) November		0-4
	b. Sum of Lines (1) through (4)			0-5
	c. AVERAGE NUMBER (divide sum on Line b by 4)			0-6
	d. All other employees, March 15th			0-7
	e. TOTAL NUMBER OF EMPLOYEES (Sum of Lines c and d)			0-8
ITEM 2B—PROPRIETORS AND FIRM MEMBERS IN 1963	a. Total number of proprietors and firm members (not applicable to corporations)			3-1
	b. Number of proprietors and firm members (included in Line a above) regularly performing production, development, or exploration work at this establishment			3-2
ITEM 3 PAYROLLS IN 1963	a. Production, development, and exploration worker wages	Millions	Dollars	1-1
	b. All other employee salaries and wages	\$	\$	1-2
	c. TOTAL PAYROLL (Sum of Lines a and b)	\$	\$	1-3*
ITEM 4 MAN-HOURS OF PRODUCTION, DEVELOPMENT, AND EXPLORATION WORKERS BY DEPARTMENTS IN 1963	a. Operating and maintaining wells	Millions	Thous.	3-3
	b. Drilling wells and rig building			3-4
	c. Exploration work (except drilling wells)			3-5
	d. Other work (Specify)			3-6
	e. TOTAL PRODUCTION, DEVELOPMENT, AND EXPLORATION WORKER MAN-HOURS (Sum of Lines a through d)			3-7*

<b>B. LOCATION OF OPERATIONS INCLUDED IN THIS REPORT</b> (1) State _____ (2) District (for Louisiana, Texas, and New Mexico only—see map in instructions) _____ (3) Did you have operations in more than one county in this State in 1963? <input type="checkbox"/> Yes <input type="checkbox"/> No (If "No," enter name of county) _____ County _____		<b>ITEM 5 COST OF PURCHASED SUPPLIES, FUELS, ELECTRICITY, CONTRACT WORK, AND MACHINERY IN 1963</b> a. Supplies used and gas purchased for gas-lift and repressuring b. (Not applicable to this form) c. Purchased fuels consumed d. Purchased electricity e. Contract work done for you by others f. <b>TOTAL COST, excluding purchased machinery (Sum of Lines a through e)</b> → g. Purchased machinery installed (include all new and used machinery, equipment, parts, and used plant not reported above) h. Development and exploration of mineral property i. New structures and additions to fixed plant (including capitalized repairs and improvements) j. New machinery and new equipment (including capitalized repairs) k. Used plant and used equipment acquired from others l. <b>TOTAL CAPITAL EXPENDITURES (Sum of Lines a through d)</b> →		<b>ITEM 6 CAPITAL EXPENDITURES DURING 1963 (Exclude land and mineral rights)</b> a. Purchased electricity (for which cost is reported in Item 5d) b. Generated electricity (gross less generating station use) c. Electricity sold or transferred to other establishments (Report its value in Item 12, Line 13)		<b>ITEM 7 QUANTITY OF ELECTRICITY IN 1963</b> a. Total quantity of water intake (fresh and brackish, including water for flooding, and water used that was produced with oil) in this establishment during 1963. (Check ONE box only) 1 <input type="checkbox"/> Under 1 million gallons 2 <input type="checkbox"/> 1 through 9 million gallons 3 <input type="checkbox"/> 10 through 99 million gallons 4 <input type="checkbox"/> 20 through 99 million gallons 5 <input type="checkbox"/> 100 million gallons or over 6 <input type="checkbox"/> 10 through 19 million gallons		<b>ITEM 8 WATER INTAKE IN 1963</b> a. Total quantity of water intake (fresh and brackish, including water for flooding, and water used that was produced with oil) in this establishment during 1963. (Check ONE box only) 1 <input type="checkbox"/> Under 1 million gallons 2 <input type="checkbox"/> 1 through 9 million gallons 3 <input type="checkbox"/> 10 through 99 million gallons 4 <input type="checkbox"/> 20 through 99 million gallons 5 <input type="checkbox"/> 100 million gallons or over 6 <input type="checkbox"/> 10 through 19 million gallons		<b>ITEM 9 FUELS CONSUMED IN 1963</b> a. Purchased fuels used (Report quantities in units specified; report TOTAL delivered cost. Do not report cost per unit.) (1) Fuel oil: Distillate, light, Grades 1-4 (P.S. 100, 200) Residual, heavy, Grades 5, 6 (P.S. 300, 400) (2) Gas: natural, manufactured, and mixed (3) Gasoline (4) Other fuels: liquefied petroleum gas, coal, coke, wood, and other (5) <b>TOTAL COST OF PURCHASED FUELS CONSUMED</b> → (Sum of (1) through (4); should be same as Item 5c) b. Fuels produced and used in this establishment for power or heat (1) Crude petroleum (2) Natural gas		<b>ITEM 10 HORSE-POWER RATING OF POWER EQUIPMENT AT END OF 1963</b> a. Internal combustion engines, steam engines and turbines, and other prime movers: (1) In high-way-type equipment (2) In all other equipment (a) Driving generators (b) Not driving generators	
<b>C. FORM OF OWNERSHIP OF OPERATING COMPANY AT END OF 1963</b> (Check one) 1 <input type="checkbox"/> Individual proprietor 2 <input type="checkbox"/> Partnership 3 <input type="checkbox"/> Corporation (Do not include any form of cooperative association) 4 <input type="checkbox"/> Cooperative association (corporate or noncorporate) 5 <input type="checkbox"/> Other (Specify) _____		<b>D. FEDERAL SOCIAL SECURITY IDENTIFICATION NUMBER</b> Enter identification number used for this establishment (as shown on Employer's Quarterly Federal Tax Return, Treasury Form 941).		<b>E. COMPANY ORGANIZATION OF OPERATING COMPANY</b> (1) Does this company operate more than one place of business under the same Identification Number shown in D above? Yes <input type="checkbox"/> No <input type="checkbox"/> (2) Does this company own or control another company? Yes <input type="checkbox"/> No <input type="checkbox"/> (3) Is this company owned or controlled by another company? Yes <input type="checkbox"/> No <input type="checkbox"/> (If "Yes," is checked in Part (3), give name and address of owning or controlling company.)		<b>FOR CENSUS USE ONLY</b> 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16							

11 LIES AND PUR- ED GAS AND ESSUR- 663	Description A	7 Line No.	7-1 Code B	Unit of measure C	7-2 Quantity D	7-3 Delivered cost E	
						Millions Thous.	Cents
	Gas purchased for gas lift and repressuring (Exclude gas reported in Item 12, Lines 8 and 9)	1	1313 05	5		\$	
	Steel mill shapes and forms (such as casing, tubing, pipe, plates, sheets, piling, drill steel bars, wire, and structural shapes)	2	3312 01	4.		\$	
	Other supplies used (such as drill bits and reamers, drilling fluid materials, cement, lumber, parts for re- newals and repairs, lubricants, and water purchased)	3	9700 99	8		\$	
	<b>TOTAL COST (Sum of Lines 1, 2, and 3; should be the same as Item 5a)</b>	4				\$	
12 DUCTS SERV- IN 1963	Description A	8 Line No.	8-1X Census product code B-1	Unit of measure B-2	8-3 Quantity D	8-4 Total value at wells E	
	<b>Crude petroleum</b> , including field condensate and drips (Report volumes corrected to 60° F.)						
	Shipped	1	13120 03	58		\$	
	Used in lease operations for power, heat, or other purposes, including losses (also report oil used for power or heat in Item 9, Line b(1).)	2	13120 06	88		\$	
	<b>Natural gas</b> (Adjust all volumes to a pressure base of 14.65 pounds absolute at 60° F.)	3	13130 01	86		\$	
	Gross produc- tion	4	13130 03	46		\$	
	Gross Disposition	5	13130 09	16		\$	
	Shipped					\$	
	To distributors and transmission companies and net to natural gas liquids plants (In value include the producer's realization from all products in the gas delivered to natural gas liquids plants.)	6	13130 12	56		\$	
	To consumers (domestic, commercial, and industrial, incl. to own refineries)	7	13130 22	46		\$	
	Used in lease operations for power, heat, or gas lift (net) (also report gas used for power or heat in Item 9, Line b(2).)	8	13130 37	26		\$	
	Returned to underground formations for repressuring, pressure maintenance, and cycling (exclude gas reported in Item 11, Line 1)	9	13130 52	16		\$	
	Net change in underground storage	10	13130 62	06		\$	
	Vented to air, burned in flares, and other losses	11	13130 72	96		\$	
	<b>TOTAL DISPOSITION (Sum of Lines 6 through 11; should be same as Line 5 above)</b>	12	13130 82	86		\$	
	<b>Other products shipped</b> (Specify kind and unit of measure)	13				\$	
	Drilling oil, gas, dry, or service wells (Enter number and kinds of wells drilled, total footage drilled, and total cost of drilling these wells in the "Remarks" section of this form)	14	13818 01	83		\$	
	Drilling in, spudding in, and tailing in	15	13818 02	63		\$	
	Reworking wells	16	13818 04	23		\$	
	Pumping wells but not operating leases	17	13848 17	17		\$	
	Other work (Specify)	18				\$	
	<b>TOTAL VALUE (Sum of Lines 1 through 18)</b>	19	77000 00	88		\$	
13 GES IN ERSHIP PERA- OF ESTAB- MENT NG 1963	(Check proper box and furnish information)	1963		1963			
	a. Purchased or leased by you (Enter date, name, and address of former owner or lessee in Item 19.)	Yes	No	d. Reorganized (partnership change or change in corporate status)			
	b. Sold or leased (Enter date, name, and address of purchaser or lessee in Item 19.)			e. Started new business (no previous operator)			
	c. Went out of business (no new operator) (Specify date in Item 19.)			f. Remained the same as in previous year			



Report below the number of oil and gas wells (including condensate wells) operated by you in the State (or contiguous offshore territories) designated in Item 1-B. If a well produced both oil (or condensate) and gas, classify it according to its more valuable total product; do not report it as both an oil and gas well. Service wells (gas injection, water injection, brine disposal, etc.) should be reported on Lines 6, 7, and 16. On Line 12, report oil and gas wells converted to service wells. Count multiple completions as one well.

Item	9	Line No.	9-1	9-2		9-3		9-4	
				Total C	Oil D	Gas E	Total C	Oil D	Gas E
A									
Producing during December 1962	1	921							
Shut-in or idle during all of December 1962	2	922							
Drilled and completed in 1963									
Producing wells	3	923							
Multiple completions included in 3 above	4	924							
Dry holes	5	925							
Service wells (Exclude converted wells)	6	926							
Wells recompleted in 1963	7	927							
Purchased (or leased) in 1963	8	928							
TOTAL (Sum of Lines 1, 2, 3, and 8)	9	920							

Report here the designated costs of drilling and equipping all wells completed in 1963, as reported under Item 14, Lines 3, 5, and 6, including the cost of dry holes and service wells drilled. Report only the costs specified; do not include other costs such as taxes, interest on investment, etc. Do not reduce costs by test well and dry hole contributions.

9	9-1	9-2	9-3		9-4	9-5	9-6	9-7	9-8		
			Wells completed in 1963								
Kind of wells drilled	Line No.	Code	Number of wells <sup>2</sup>	Total footage drilled (Thousand feet)	Payments to drilling contractors, including day work and turnkey	Payments to other contractors	Cost of casing, tubing, and well equipment, except payment to contractors for such equipment <sup>3</sup>	All other costs of drilling and equipping	TOTAL COST (Sum of Columns E, F, G, and H)		
										I	
										Millions	Dollars
Oil wells	1	951			\$	\$	\$	\$	\$		
Gas wells	2	952			\$	\$	\$	\$	\$		
Dry holes <sup>4</sup>	3	953			\$	\$	\$	\$	\$		
Service wells <sup>5</sup>	4	954			\$	\$	\$	\$	\$		
TOTAL (Sum of Lines 1 through 4; Column C should be the sum of Item 14, Column C, Lines 3, 5, and 6)					\$	\$	\$	\$	\$		
Cost of lease equipment beyond the Christmas tree INCLUDED ABOVE, such as artificial lift equipment, separators, heater-treaters, flow lines, and storage tanks:											
Oil wells	6	955			\$	\$	\$		\$		
Gas wells	7	956			\$	\$	\$		\$		
Service wells <sup>5</sup>	8	957			\$	\$	\$		\$		
TOTAL (Sum of Lines 6 through 8)					\$	\$	\$		\$		

1 Report cost of labor, supplies, water, fuel, and power used in such operations as erecting and dismantling drilling rig and derrick, drilling hole, running and cementing casing, and hauling materials; include machinery and tool charges or rentals, deduct the value of material salvaged after use.

2 Count multiple completions as one well.

3 Include cost of delivering and installing equipment, but do not duplicate costs reported under payments to contractors (Columns E and F). Deduct value of your equipment that was salvaged and was used again, but include cost of salvaging. Include tubing, wellhead fittings, gas traps, flow tanks, etc., and drilling derrick retained over well after completion, or special-production derrick.

4 Include wells drilled and abandoned without commercial production during 1963, even if they were converted to service wells.

5 Include gas-injection, water-injection, and brine-disposal wells. Exclude all converted wells. Exclude dry holes drilled with intent of commercial production even if converted to service wells in 1963.







# PENALTIES FOR FAILURE TO REPORT

FORM MC-13C  
(1303);

## U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS **1963 CENSUS OF MINERAL INDUSTRIES** OIL AND GAS FIELD SERVICES

### PLEASE NOTE:

- The Census Bureau reviews your report for omissions, inconsistencies, and unusual ratios. Incomplete and inaccurate answers will result in correspondence which is both costly and time consuming.
  - If book records are not available, reasonably accurate estimates for most items are acceptable for the statistical purposes of this survey.
  - Only one report is required for your oil and gas field work for others in all States (including offshore operations). If you performed such work for your own account or operated leases, report data for such activity in Item 14 of this form.
  - Please complete and return this form in the envelope provided to the **Jeffersonville Census Operations Office, Jeffersonville, Indiana**. If filing by due date causes an undue burden, a request for extension should be directed to that office.
- E. PLEASE READ INSTRUCTIONS BEFORE COMPLETING REPORT**

**CONFIDENTIAL**—Response to this inquiry is required by Act of Congress (13 U.S.C.). Your report you submit to the Census Bureau is confidential and may be seen only by sworn Census employees. It may not be used for purposes of taxation, investigation, or regulation. Records retained in your files are also immune from legal process.

In correspondence pertaining to this report please refer to the 11-digit file number in the box above your name.



MC-13C (1303)

**KEEP THIS COPY FOR YOUR FILES**

**PLEASE COMPLETE AND RETURN THE FORM WHICH SHOWS YOUR NAME AND ADDRESS**

(Please correct if mailing address has changed)

COMPLETE EVERY ITEM (Enter "0" where appropriate)				1963
ITEM 2A NUMBER OF EMPLOYEES IN 1963	a. Number of production, development, and exploration workers during pay period ended nearest 15th of—			
	(1) March			
	(2) May			
	(3) August			
b. Sum of Lines (1) through (4)				
c. AVERAGE NUMBER (divide sum on Line b by 4)				
d. All other employees, March 15th				
e. TOTAL NUMBER OF EMPLOYEES (Sum of Lines c and d)				
ITEM 2B—PROPRIETORS AND FIRM MEMBERS IN 1963	a. Total number of proprietors and firm members (not applicable to corporations)			
	b. Number of proprietors and firm members (included in Line a above) regularly performing production, development, or exploration work at this establishment			
ITEM 3 PAYROLLS IN 1963	a. Production, development, and exploration worker wages			
	b. All other employee salaries and wages			
	c. TOTAL PAYROLL (Sum of Lines a and b)			
ITEM 4 MAN-HOURS OF PRODUCTION, DEVELOPMENT, AND EXPLORATION WORKERS BY KIND OF WORK IN 1963	a. Operating and maintaining wells			
	b. Drilling wells and rig building			
	c. Exploration work (except drilling wells)			
	d. Other work (Specify)			
	e. TOTAL PRODUCTION, DEVELOPMENT, AND EXPLORATION WORKER MAN-HOURS (Sum of Lines a through d)			

ITEM 1. GENERAL INFORMATION			
A. NAME AND ADDRESS OF CONTRACTING COMPANY			
Name			
Address (street and number)			
City			State

EXAMPLE	Mil- lions	Thou- sands	Dol- lars	Cen- ts
If the payroll is \$1,125,628.28:	000	000	000	XX
Preferred method—	\$ 1	126		XX
Acceptable method—	\$ 1	125	628	XX

**IMPORTANT:** Figures for dollars, man-hours, and KWH should be rounded to THOUSANDS. If you wish you may report to the nearest unit. In either case, please be careful to enter your figures in the CORRECT COLUMNS.



# B. LOCATION OF OPERATIONS

(1) List States in order of importance in which you performed oil and gas field services for others during 1963.

(2) If only one State is listed above, did you perform such services in more than one county? (Check one)

☐ Yes ☐ No  
(If "No" give name of county)

County

# C. FORM OF OWNERSHIP OF OPERATING COMPANY AT END OF 1963 (Check one)

- 1 ☐ Individual proprietor  
2 ☐ Partnership  
0 ☐ Corporation (Do not include any form of cooperative association)  
8 ☐ Cooperative association (corporate or noncorporate)  
9 ☐ Other (Specify) \_\_\_\_\_

# D. FEDERAL SOCIAL SECURITY IDENTIFICATION NUMBER

Enter identification number used for this establishment (as shown on Employer's Quarterly Federal Tax Return, Treasury Form 941).

# E. COMPANY ORGANIZATION OF OPERATING COMPANY

- (1) Does this company operate more than one place of business under the same Identification Number shown in D above? Yes ☐ No ☐  
(2) Does this company own or control another company? ☐  
(3) Is this company owned or controlled by another company? ☐

(If "Yes," is checked in Part (3), give name and address of owning or controlling company.)

## FOR CENSUS USE ONLY

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

ITEM 5 COST OF SUPPLIES, PRODUCTS FOR RESALE, PURCHASED FUELS, ELECTRIC ENERGY, SUBCONTRACT WORK, AND MACHINERY IN 1963	a. Purchased supplies used		Millions	Thous.	Cents
b. Products bought and resold without further processing			\$		XX
c. Purchased fuels consumed			\$		XX
d. Purchased electricity			\$		XX
e. Subcontract work done for you by others			\$		XX
f. TOTAL COST, excluding purchased machinery (Sum of Lines a through e)			\$		XX
g. Purchased machinery installed (include all new and used machinery, equipment, parts, and used plant not reported above)			\$		XX
ITEM 6 CAPITAL EXPENDITURES DURING 1963 (Exclude land and mineral rights)	a. New structures and additions to fixed plant (including capitalized repairs and improvements)		\$		XX
	b. New machinery and new equipment (including capitalized repairs)		\$		XX
	c. Used plant and used equipment acquired from others		\$		XX
ITEM 7 QUANTITY OF ELECTRICITY IN 1963	d. TOTAL CAPITAL EXPENDITURES (Sum of Lines a through c)		\$		XX
	a. Purchased electricity (for which cost is reported in Item 5d)		Millions	Thous.	XX
	b. Generated electricity (gross less generating station use)				XX
	c. Electricity sold or transferred to other establishments (Report its value in Item 18, Line 18)				XX
ITEM 8 WATER INTAKE IN 1963	a. Total quantity of water intake (fresh and brackish, including water for flooding and water used that was produced with oil) in this establishment during 1963. (Check ONE box only)		b. Was your principal source of water, except water produced with oil, from (1) publicly- or privately-owned utility or (2) another source?		
	1 <input type="checkbox"/> Under 1 million gallons		4 <input type="checkbox"/> 20 through 99 million gallons		
	2 <input type="checkbox"/> 1 through 9 million gallons		5 <input type="checkbox"/> 100 million gallons or over		
	3 <input type="checkbox"/> 10 through 19 million gallons				
ITEM 9 FUELS CONSUMED IN 1963	a. Fuel oil:		Unit of measure		Quantity
	(1) Distillate, light, Grades 1-4, (P.S. 100, 200)		Barrel		
	(2) Residual, heavy, Grades 5, 6, (P.S. 300, 400)		(42 gal.)		
	b. Gas: Natural, manufactured, and mixed		Thous. cu. ft.		
	c. Gasoline		Thous. gal.		
	d. Other fuels: Liquefied petroleum gas, coke, wood, and other				
	e. TOTAL COST OF PURCHASED FUELS CONSUMED (Sum of Lines a through d; should be same as Item 5c)				
ITEM 10 HORSEPOWER RATING OF POWER EQUIPMENT AT END OF 1963	a. Internal combustion engines, steam engines and turbines, and other prime movers:		Code		Total horsepower rating
	(1) In highway-type equipment		9-1XXX		9-5
	(2) In all other equipment				
	(a) Driving generators		31		
	(b) Not driving generators		32		
	b. Electric motors (1 horsepower and over)		33		
			34		

Description <b>A</b>	Line No.	Code <b>B</b>	Unit of measure <b>C</b>	Quantity <b>D</b>	7-3	
					Delivered cost <b>E</b>	
					Millions	Thous.
Steel mill shapes and forms (such as casing, tubing, pipe, plates, sheets, piling, drill steel bars, wire, and structural shapes)	1	331.201	Short ton			
Other supplies used (such as drill bits and reamers, drilling fluid materials, cement, lumber, parts for renewals and repairs, lubricants, and water purchased)	2	970099				
<b>TOTAL COST (Sum of Lines 1 and 2; same as Item 5a)</b>	3					
<b>IN</b> <b>B-</b>						

Description <b>A</b>	Line No.	Code <b>B</b>	Unit of measure <b>C</b>	Quantity <b>D</b>	7-3	
					Delivered cost <b>E</b>	
					Millions	Thous.
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Other supplies used (such as drill bits and reamers, drilling fluid materials, cement, lumber, parts for renewals and repairs, lubricants, and water purchased)	2	970099				
<b>TOTAL COST (Sum of Lines 1 and 2; same as Item 5a)</b>	3					
<b>IN</b> <b>B-</b>						

Description <b>A</b>	Line No.	Code <b>B</b>	Unit of measure <b>C</b>	Quantity <b>D</b>	7-3	
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Other supplies used (such as drill bits and reamers, drilling fluid materials, cement, lumber, parts for renewals and repairs, lubricants, and water purchased)	2	970099				
<b>TOTAL COST (Sum of Lines 1 and 2; same as Item 5a)</b>	3					
<b>IN</b> <b>B-</b>						

Description <b>A</b>	Line No.	Code <b>B</b>	Unit of measure <b>C</b>	Quantity <b>D</b>	7-3	
					Delivered cost <b>E</b>	
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Other supplies used (such as drill bits and reamers, drilling fluid materials, cement, lumber, parts for renewals and repairs, lubricants, and water purchased)	2	970099				
<b>TOTAL COST (Sum of Lines 1 and 2; same as Item 5a)</b>	3					
<b>IN</b> <b>B-</b>						

Description <b>A</b>	Line No.	Code <b>B</b>	Unit of measure <b>C</b>	Quantity <b>D</b>	7-3	
					Delivered cost <b>E</b>	
					Millions	Thous.
Steel mill shapes and forms (such as casing, tubing, pipe, plates, sheets, piling, drill steel bars, wire, and structural shapes)	1	331.201	Short ton			
Other supplies used (such as drill bits and reamers, drilling fluid materials, cement, lumber, parts for renewals and repairs, lubricants, and water purchased)	2	970099				
<b>TOTAL COST (Sum of Lines 1 and 2; same as Item 5a)</b>	3					
<b>IN</b> <b>B-</b>						

Description <b>A</b>	Line No.	Code <b>B</b>	Unit of measure <b>C</b>	Quantity <b>D</b>	7-3	
					Delivered cost <b>E</b>	
					Millions	Thous.
Steel mill shapes and forms (such as casing, tubing, pipe, plates, sheets, piling, drill steel bars, wire, and structural shapes)	1	331.201	Short ton			
Other supplies used (such as drill bits and reamers, drilling fluid materials, cement, lumber, parts for renewals and repairs, lubricants, and water purchased)	2	970099				
<b>TOTAL COST (Sum of Lines 1 and 2; same as Item 5a)</b>	3					
<b>IN</b> <b>B-</b>						

Description <b>A</b>	Line No.	Code <b>B</b>	Unit of measure <b>C</b>	Quantity <b>D</b>	7-3	
					Delivered cost <b>E</b>	
					Millions	Thous.
Steel mill shapes and forms (such as casing, tubing, pipe, plates, sheets, piling, drill steel bars, wire, and structural shapes)	1	331.201	Short ton			
Other supplies used (such as drill bits and reamers, drilling fluid materials, cement, lumber, parts for renewals and repairs, lubricants, and water purchased)	2	970099				
<b>TOTAL COST (Sum of Lines 1 and 2; same as Item 5a)</b>	3					
<b>IN</b> <b>B-</b>						

Description <b>A</b>	Line No.	Code <b>B</b>	Unit of measure <b>C</b>	Quantity <b>D</b>	7-3	
					Delivered cost <b>E</b>	
					Millions	Thous.
Steel mill shapes and forms (such as casing, tubing, pipe, plates, sheets, piling, drill steel bars, wire, and structural shapes)	1	331.201	Short ton			
Other supplies used (such as drill bits and reamers, drilling fluid materials, cement, lumber, parts for renewals and repairs, lubricants, and water purchased)	2	970099				
<b>TOTAL COST (Sum of Lines 1 and 2; same as Item 5a)</b>	3					
<b>IN</b> <b>B-</b>						

Description <b>A</b>	Line No.	Code <b>B</b>	Unit of measure <b>C</b>	Quantity <b>D</b>	7-3	
					Delivered cost <b>E</b>	
					Millions	Thous.
Steel mill shapes and forms (such as casing, tubing, pipe, plates, sheets, piling, drill steel bars, wire, and structural shapes)	1	331.201	Short ton			
Other supplies used (such as drill bits and reamers, drilling fluid materials, cement, lumber, parts for renewals and repairs, lubricants, and water purchased)	2	970099				
<b>TOTAL COST (Sum of Lines 1 and 2; same as Item 5a)</b>	3					
<b>IN</b> <b>B-</b>						

Description <b>A</b>	Line No.	Code <b>B</b>	Unit of measure <b>C</b>	Quantity <b>D</b>	7-3	
					Delivered cost <	

**Did you operate oil and gas field leases for your own account or for others during 1963?**  
(If answer is "Yes," complete Parts a and b of this item.)

**a. Wells operated by you and production, by State and county in 1963**

State <b>A</b>	Country <b>B</b>	Number of wells <b>C</b>	Barrels of oil <b>D</b>	Million cubic feet of gas <b>E</b>

b. Wells drilled in 1963 on leases which you operated

Report here the designated costs of drilling and equipping all wells drilled by you on contract for others. Report only the costs specified; do not include other costs such as taxes, interest on investment, etc. Do not report the cost of wells drilled for your own account and not on contract for others. Do not include costs borne directly by oil or gas companies and not covered by amounts received by you for contract work.

[illegible]

- 1 Report cost of labor, supplies, water, fuel, and power used in such operations as erecting and dismantling drilling rig and derrick, drilling hole, running and cementing casing, and hauling materials; include machinery and tool charges or rentals, deduct the value of material salvaged after use. Exclude costs borne directly by the oil or gas companies.
- 2 Count multiple completions as one well.
- 3 Include cost of delivering and installing equipment, but do not duplicate costs reported under payments to subcontractors (Columns E and F). Deduct value of your equipment that was salvaged and used again, but include cost of salvaging. Include tubing, wellhead fittings, gas traps, flow tanks, etc., and drilling derrick retained over well after completion, or special-production derrick.
- 4 Include wells drilled and abandoned without commercial production during 1963, even if they were converted to service wells.
- 5 Include gas-injection, water-injection, and brine-disposal wells. Exclude dry holes drilled with intent of commercial production even if converted to service wells in 1963.







1963 CENSUS OF MINERAL INDUSTRIES

OIL AND GAS

PLEASE NOTE:

- A.** The Census Bureau reviews your report for omissions, inconsistencies, and unusual ratios. Incomplete and inaccurate answers will result in correspondence which is both costly and time consuming. Be sure to **complete every item**. Enter "0" in items B-J, if appropriate.
- B.** If book records are not available, reasonably accurate estimates for most items are acceptable for the statistical purposes of this survey.
- C.** Only one report is required for your operation of oil and gas field properties in all States and offshore operations. Include drilling, exploration, and operation of producing wells. The report should be on a gross basis for all leases operated by you, but should exclude your interest in leases operated by others.
- D.** Please complete and return this form in the envelope provided to the **Jeffersonville Census Operations Office, Jeffersonville, Indiana**. If filing by due date causes an undue burden, a request for extension should be directed to that office.

**E. PLEASE READ INSTRUCTIONS BEFORE COMPLETING REPORT**

Figures for dollars should be rounded to THOUSANDS. If you wish you may report to the nearest unit. In either case, **please be careful to enter your figures in the CORRECT COLUMNS.** (See example below)

If the payroll is \$1,125,628.28:

EXAMPLE

Mil- lions	Thou- sands	Dol- lars	Cen- ts
000	000	000	XX
\$ 1	126		XX
\$ 1	125	628	XX

Preferred method →  
Acceptable method →

**ITEM A—GENERAL INFORMATION**

**1. NAME AND ADDRESS OF OPERATING COMPANY**

a. Name

b. Address (Street and number)

c. City

State

**CONFIDENTIAL**—Response to this inquiry is required by Act of Congress (13 U.S.C.). The report you submit to the Census Bureau is confidential and may be seen only by sworn Census employees. It may not be used for purposes of taxation, investigation, or regulation. Copies retained in your files are also immune from legal process.

In correspondence pertaining to this report please refer to the 11-digit file number in the box above your name.

MC-13S-1



KEEP THIS COPY FOR YOUR FILES

PLEASE COMPLETE AND RETURN THE FORM WHICH SHOWS YOUR NAME AND ADDRESS

(Please correct if mailing address has changed)

**ITEM C—PAYROLLS**

Salaries, wages, bonuses, commissions, and other remunerations paid in 1963, before deductions. (Exclude payments to proprietors and partners)

TOTAL

**ITEM D—SELECTED COSTS IN 1963**

1. Cost of supplies, gas purchased for gas lift and repressuring, and purchased fuels and electric energy consumed in 1963. (Include drill bits and reamers, drilling fluid materials, cement, lumber, pipe, tubing, casing, parts for repairs, lubricants, and water purchased. Report new and used machinery on Line 4.)

2. Cost of contract work done for you by others during 1963. (Include drilling, pumping, cementing, cleaning-out, hauling, etc.)

3. TOTAL COSTS, EXCLUDING MACHINERY (Sum of Lines 1 and 2)

4. Cost of new and used machinery, equipment, and parts (not reported above) installed in 1963.

**ITEM E—CAPITAL EXPENDITURES IN 1963**

Cost of capitalized development, exploration, construction, machinery, and equipment installed in 1963. (Include major alterations and capitalized repairs. Include both new and used equipment. Exclude land and mineral rights.)

## 2. LOCATION OF OPERATIONS IN 1963

a. List States in order of importance in which you had—

Drilling operations Well operation and exploration only

b. If only one State is listed above, did you have operations in more than one county? ☐ Yes ☐ No  
(If "No" enter name of county)

County

## 3. FORM OF OWNERSHIP OF OPERATING COMPANY (Check one)

- 1 ☐ Individual proprietor  
2 ☐ Partnership  
3 ☐ Corporation (Do not include any form of cooperative association)  
4 ☐ Cooperative association (corporate or noncorporate)  
5 ☐ Other (Specify) \_\_\_\_\_

## 4. FEDERAL SOCIAL SECURITY IDENTIFICATION NUMBER

Enter identification number used for this establishment (as shown on employer's Quarterly Federal Tax Return, Treasury Form 941).

## 5. COMPANY ORGANIZATION OF OPERATING COMPANY

- a. Does this company operate more than one place of business under the same Employer Identification Number shown in 4 above? ☐ Yes ☐ No  
b. Does this company own or control another company? ☐ Yes ☐ No  
c. Is this company owned or controlled by another company? ☐ Yes ☐ No

(If "Yes" is checked in Part c, give name and address of owning or controlling company.)

## ITEM B—NUMBER OF PERSONS ENGAGED

Total number		Key	
1. Number of proprietors and partners who regularly performed manual (production, development, or exploration) work at this operation in 1963.		0-1	
		0-2	
2. Number of paid employees during the pay-period ended nearest March 15, 1963 (exclude proprietors and partners).		0-1	
		0-2	

## FOR CENSUS USE ONLY

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16

## ITEM F—PRODUCTS AND SERVICES OF THIS ESTABLISHMENT IN 1963

Report the entire output of wells operated by you and reported in Item H, including royalty interests and subsidy payments. Volumes for crude petroleum, Lines 1 and 2, are to be reported in thousands of barrels corrected to 60° F. Volumes for natural gas, Lines 3 through 11, are to be reported in million cubic feet a pressure base of 14.65 pounds absolute at 60° F.

For Line 6, Col. (E), include the producer's realization from all products contained in the gas delivered to natural gas liquids plants.

Line number	Products and services  (A)	8	8-1X	8-3	8-4		
		Census product code (B-1)	Quantity (Report in the unit of measure as specified) (D)	Total value at well (E)			
					Mil- lions	Thou- sands	Dol- lars
					000	000	000
1	Crude petroleum, including field condensate and drips (See instructions above)						
	Shipped	13120 03 58		Thous. barrels			
2	Used in lease operations for power, heat, or other purposes, including losses	13120 06 88					
3	Natural gas (See instructions above)			Mil. cu. ft.			
	From oil wells (casinghead)	13130 01 86					
4	From gas wells	13130 03 46					
5	GROSS PRODUCTION (Sum of Lines 3 and 4)	13130 09 16					
	Shipped						
6	To distributors and transmission companies and net to natural gas liquids plants	13130 12 56					
7	To consumers (domestic, commercial, and industrial)	13130 22 46					
8	Used in lease operations for power, heat, or gas lift (net)	13130 37 26					
9	Returned to underground formations for repressuring, pressure maintenance, and cycling	13130 52 16					
10	Vented to air, burned in flares, and other losses	13130 72 96					
	GROSS DISPOSITION (Sum of Lines 6 through 10; should be the same as Line 5)	13130 82 86					
12	Other products shipped (Specify kind and unit of measure)						
13	Amount received or due for work or services performed for other establishments (Specify kind of work)						
14							
15	TOTAL VALUE (Sum of Lines 1 through 14)	77000 99 08					



☐ Drilling only ☐ Exploration work ☐ Wells shut-in ☐ Abandoned

ITEM H—NUMBER OF WELLS OPERATED

Report the number of oil and gas wells operated by you in the States (including offshore territories) listed in Item A-2. If a well produced both oil or condensate and gas, classify it according to its most valuable total product; do not report it as both an oil and gas well. Service wells (gas injection, water injection, brine disposal, etc.) should be reported on Lines 5, 6, and 15. Report on Line 11 the number of oil and gas wells converted to service wells.

Line No.	Item (A)	Code (B)	Number of wells			Line No.	Item (A)	Code (B)	Number of wells		
			Total (C)	Oil (D)	Gas (E)				Total (C)	Oil (D)	Gas (E)
1	Producing during December 1962	921				9	Producing during December 1963	931			
2	Shut-in or idle during all of December 1962	922				10	Shut-in or idle during all of December 1963	932			
3	Drilled and completed during 1963 Producing wells	923				11	Converted to service wells in 1963	933			
4	Dry holes	925				12	Abandoned in 1963 (exclude dry holes)	934			
5	Service wells (exclude converted wells)	926				13	Sold (or leased) in 1963	935			
6	Wells recompleted in 1963	927				14	TOTAL (Sum of Lines 9 through 13; should be same as Line 8)				
7	Purchased (or leased) in 1963	928									
8	TOTAL (Sum of Lines 1, 2, 3, and 7)	920				15	Wells being used for service during 1963	936			

ITEM I—COST OF DRILLING AND EQUIPPING WELLS COMPLETED IN 1963

Report the designated costs of drilling and equipping all wells completed in 1963, including the cost of dry holes and service wells drilled as reported in Item H, Lines 3, 4, and 5. Report only the costs specified; do not include other costs, such as taxes, interest on investment, etc. Do not reduce costs by test well and dry hole contributions.

Line number	Kind of well (A)	Code (B)	Wells completed during 1963		Total footage drilled (Thousand feet) (D)	Payments to contractors, including day work and turnkey (E)			Any other costs of drilling and equipping <sup>2</sup> (F)			TOTAL COST (Sum of Cols. (E) and (F)) (G)		
			9	9-1		9-2	9-3	9-4XX	9-7	9-8				
			Number of wells (C)			Millions (000)	Thousands (000)	Dollars (000)	Cent (XX)	Millions (000)	Thousands (000)	Dollars (000)	Cent (XX)	
1	Oil wells	961				\$			XX	\$			XX	XX
2	Gas wells	962				\$			XX	\$			XX	XX
3	Dry holes <sup>3</sup>	963				\$			XX	\$			XX	XX
4	Service wells <sup>4</sup>	964				\$			XX	\$			XX	XX
5	TOTAL (Sum of Lines 1 through 4; Col. (C) should be sum of Lines 3, 4, and 5, Col. (C), Item H)		960			\$			XX	\$			XX	XX

<sup>1</sup> Report cost of labor, supplies, water, fuel, and power used in such operations as erecting and dismantling drilling rig and derrick, drilling hole, running and cementing casing, and hauling materials; include machinery and tool charges or rentals, deduct the value of material salvaged after use.

<sup>2</sup> Include cost of delivering and installing equipment, but do not duplicate costs reported under payments to contractors (Column E). Deduct value of your equipment that was salvaged and was used again, but include cost of salvaging. Include casing, tubing, wellhead fittings, gas traps, flow tanks, etc., and drilling derrick retained over well after completion, or special-production derrick.

<sup>3</sup> Include wells drilled and abandoned without commercial production during 1963, even if they were converted to service wells.

<sup>4</sup> Include gas-injection, water-injection, and brine-disposal wells. Exclude all converted wells. Exclude dry holes drilled with intent of commercial production even if converted to service wells in 1963.

**ITEM J—STATE AND COUNTY DATA FOR 1963**

List the States and counties in which you had oil or gas field exploration, drilling, or production operations during 1963. (Show separately figures for offshore operations for each State.) Total figure in Col. (C), Line 7, should be the same as Item B, Line 2. Total figure in Col. (D), Line 7, should be the same as Item F, Line 1, Col. (D). Total figure in Col. (E), Line 7, should be the sum of Lines 6 and 7, Item F, Col. (D). Total figure in Col. (F), Line 7, should be the same as Item E.

Line number	State (A-1)	County (or parish) and offshore locations (A-2)	9	9-1 Code (B)	9-2 Number of employees in pay period ended nearest March 15, 1963 (C)	9-3		9-4X Total quantity  Crude petroleum shipped in 1963 ( <i>Thousand barrels</i> ) (D)	Natural gas shipped in 1963 ( <i>Million cubic feet</i> ) (E)	9-6 Capital expenditures in 1963 (F)		
						Total quantity				Mil- lions 000	Thou- sands 000	Dol- lars 000
1				8						\$		
2				8						\$		
3				8						\$		
4				8						\$		
5				8						\$		
6				8						\$		
7	TOTAL (All counties (or parishes) and offshore locations)			8						\$		

REMARKS (If additional sheets of paper are used, enter on each sheet the 11-digit file number, located in the address box above your name.)

**ITEM K PERIOD OF REPORT**

This report covers the period from \_\_\_\_\_ to \_\_\_\_\_

**ITEM L**

**CERTIFICATION**—This report is substantially accurate and has been prepared in accordance with instructions.

Signature of authorized person

Title

Date

U.S. DEPARTMENT OF COMMERCE  
BUREAU OF THE CENSUS

MC-14A

## 1963 CENSUS OF MINERAL INDUSTRIES

STONE

MC-14A (1401)

## NOTE:

The Census Bureau reviews your report for omissions, inconsistencies, and unusual ratios. Complete and inaccurate answers will result in correspondence which is both costly and consuming.

Records are not available, reasonably accurate estimates for most items are acceptable for the statistical purposes of this survey.

A separate report is required from the operator for each mine, quarry, or separately operated mill or crushing plant.

Complete and return this form in the envelope provided to the **Jeffersonville Census Operations Office, Jeffersonville, Indiana**. If filing by due date causes an undue delay, a request for extension should be directed to that office.

## READ INSTRUCTIONS BEFORE COMPLETING REPORT

**INSTRUCTIONS:** Figures for dollars, man-hours, and KWH are rounded to THOUSANDS. If you wish you may enter your figures in the CORRECT unit, please be sure to enter your figures in the CORRECT unit.

Millions	Thousands	Tens	Cents
000	000	000	XX
\$ 1	126	XX	XX
\$ 1	125	XX	XX

## GENERAL INFORMATION

## OF ESTABLISHMENT

**ACTUAL LOCATION OF ESTABLISHMENT** December 31, 1963. (Your answers to this should relate to the ACTUAL PHYSICAL LOCATION of this establishment which may be different from the mailing address.)

and number at establishment location\*

\*Establishment location cannot be described by street and give name (and number, if any) of road or and sufficient information to locate establishment, 25, 3 miles south of Charlottesville.

**CONFIDENTIAL**—Response to this inquiry is required by Act of Congress (13 U.S.C.). The report you submit to the Census Bureau is confidential and may be seen only by sworn Census employees. It may not be used for purposes of taxation, investigation, or regulation. Copies retained in your files are also immune from legal process.

In correspondence pertaining to this report please refer to the 11-digit file number in the box above your name.

(Please correct if mailing address has changed)

COMPLETE EVERY ITEM (Enter "0" where appropriate)				1963				Key
ITEM 2A NUMBER OF EMPLOYEES IN 1963	a. Number of production, development, and exploration workers during pay period ended nearest 15th of—	(1) March						0-1
		(2) May						0-2
		(3) August						0-3
		(4) November						0-4
b. Sum of Lines (1) through (4)								0-5
c. AVERAGE NUMBER (divide sum on Line b by 4)								0-6
d. All other employees, March 15th								0-7
e. TOTAL NUMBER OF EMPLOYEES (Sum of Lines c and d)								0-8
ITEM 2B—PROPRIETORS AND FIRM MEMBERS IN 1963	a. Total number of proprietors and firm members (not applicable to corporations)						3-1	
	b. Number of proprietors and firm members (included in Line a above) regularly performing production, development, or exploration work at this establishment						3-2	
ITEM 3 PAYROLLS IN 1963	a. Production, development, and exploration worker wages	Millions	Thous.	Cents				1-1
	b. All other employee salaries and wages	\$						1-2
	c. TOTAL PAYROLL (Sum of Lines a and b)	\$						1-3*
ITEM 4 MAN-HOURS OF PRODUCTION, DEVELOPMENT, AND EXPLORATION WORKERS BY DEPARTMENTS IN 1963	a. At mine or quarry	(1) Underground (mining and development)		Millions	Thous.	Hours		3-3
		(2) Open-pit or quarry (mining and stripping)						3-4
		(3) Surface (including mine shops and yards)						3-5
	b. At mill or crushing plant (including auxiliary works for this mill or plant)							3-6
c. TOTAL PRODUCTION, DEVELOPMENT, AND EXPLORATION WORKER MAN-HOURS (Sum of a and b)							3-7	
d. Man-hours included above which were spent on exploration and development							3-8	



7	7-1	7-2	7-3X		7-5	
			Received from other mines or plants of this company, purchased from others, and, in "a," stone received for preparation on a custom or toll basis	Delivered cost		
Description						
A						
a. Minerals for preparation (Estimate value of stone received for custom preparation) Rough blocks used to produce dressed stone	Line No.	B	Quantity (Short tons)	Millions	Thousands	
						Census material code
	1	141101	6			
	2	142101	5			
	(Broken stone received for crushing, screening, or washing)					
b. Supplies used (such as explosives, steel mill shapes and forms, timber and lumber purchased, forgings and castings, drill bits, other tools and parts, lubricants, and water purchased)	3	970099	8			
	4					
	c. TOTAL COST (Sum of Lines 1 through 3; same as Item 5a)					

The Bureau of Mines (U.S. Department of the Interior) collects detailed figures on the mineral products listed below. This item provides only summary figures which will serve to relate the statistics compiled from the Census of Mineral Industries to the statistics compiled from Bureau of Mines surveys. For comparable items the same data should be reported both to the Bureau of Mines and the Bureau of the Census.

Description  A		Line No.	Census product code B-1	Unit of measure B-2	Quantity of production C	Shipments and interplant transfers		Value f.o.b. quarry or plant E	
						Quantity D			
Limestone (Including dolomite, cement rock, marl, travertine, calcareous tufa)	Rough dimension stone.	1	14121 01 66	Short ton					
	Dressed dimension stone	2	32812 01 83						
	Crushed or broken stone	3	14222 01 25						
Granite (Including gneiss, syenite, diorite)	Rough dimension stone	4	14131 01 54						
	Dressed dimension stone	5	32811 01 03						
	Crushed or broken stone	6	14232 01 13						
Other stone (Including slate, marble, trap rock, sandstone, quartz, and miscellaneous types of stone)	Rough dimension stone	7	14191 01 91						
	Dressed dimension stone	8	32813 01 63						
	Crushed or broken stone	9	14292 01 50						
All other products	Ready-mixed concrete	10	32730 11 10		Cubic yd.				
	Asphalt and tar paving mixtures and blocks	11	29510 51 82						
	Other (Specify kind and unit)	12							
Items for services performed for other establishments (such as hauling, stripping, pumping, shopwork) (Exclude amounts received for dressing, milling, or crushing stone on a custom or toll basis)		13	14808 01 83						
		14	99989 00 66						
		15	77000 00 88						
d. Sales of stone and other products purchased and resold without further processing									
e. VALUE (Sum of Lines 1 through 14)									

ITEM 12B CUSTOM WORK IN 1963		9-1		9-2	
		Code		Thousands	
		917		\$	
Amount received or due for custom or toll dressing, milling, or crushing of stone (The production and shipments of such stone should be included in Item 12A, Lines 1 through 9.)					
ITEM 13 CHANGES IN OWNERSHIP OR ORGANI- ZATION OF THIS ESTAB- LISHMENT DURING 1963		(Check proper box and furnish information)			
		1963			
		Yes No			
a. Purchased or leased by you (Enter date, name, and address of former owner or lessee in Item 19.)		d. Reorganized (partnership change or change in corporate status)			
b. Sold or leased (Enter date, name, and address of purchaser or lessee in Item 19.)		e. Started new business (no previous operator)			
c. Went out of business (no new operator) (Specify date in Item 19.)		f. Remained the same as in previous year			
ITEM 14 TYPE OF OPERATION IN 1963		Type			
		Key		Preparation methods (check one or more)	
		Code		Type	
		8-1 0		(1) No preparation	
		620		(2) Dimension stone dressing (sawing, turning, planing)	
		630		(3) Crushing, grinding, or pulverizing	
		687		(4) Screening	
		685		(5) Washing	
		699		(6) Other (Specify)	
ITEMS 15-16-17		Not applicable to this form			
ITEM 18 CHECKS TO ASSURE COMPLETE AND ACCURATE REPORTING		The Census Bureau reviews your report for omissions, inconsistencies, and unusual ratios. To save you future correspondence about these problems, please make the following checks before returning your report: a. Review the report carefully to see that no items are omitted for the year being covered. b. Calculate the four "reasonableness" checks described below, entering the figures for each, and review the results. c. Correct your report for any errors you find; explain unusual figures in "Remarks" section.			
		"Reasonableness" check		Calculation required for each check	
		Item 3a (Production worker wages) ÷ Item 4c (Man-hours of production workers)		\$	
		Item 4c (Man-hours of production workers) × 1,000 ÷ Item 2Ac (Average number of production workers)			
		Item 3c (Total payroll) ÷ Item 12Ad (Total value of shipments and receipts)			
		Item 5f (Total supplies, etc. cost) ÷ Item 12Ad (Total value of shipments and receipts)			
ITEM 19 REMARKS		(If additional sheets of paper are used, enter the 11-digit File number located in the address box above your name on each sheet.)			
ITEM 20		Name of person to be contacted regarding this report.		Telephone No.	
ITEM 21		CERTIFICATION—This report is substantially accurate and has been prepared in accordance with instructions.			
		Name of company		Address	
		PERIOD OF REPORT		Title	
		This report covers the period—		Date	
		From To		Signature of authorized official	



Form EC-44, Bureau of the Census, 1963 Census of Mineral Industries. Long Form Card. Includes fields for Identification Number, Serial Number, Form Recode, State County City Codes, Tract Code, and various production and cost data.

Form EC-45, Bureau of the Census, 1963 Census of Mineral Industries. Short Form Card. Includes fields for Identification Number, Serial Number, Form Recode, State County City Codes, Tract Code, and various production and cost data.

## Appendix B

### **AUTHORITY FOR CENSUS: TITLE 13, UNITED STATES CODE**

(Codification of August 1954 amended by Acts of August 1957, September 1960, and June and October 1962)

#### **Collection and publication: Five-year periods (131)**

The Secretary shall take, compile, and publish censuses of manufactures, of mineral industries, and of other businesses . . . in the year 1954 and every fifth year thereafter, and each such census shall relate to the year immediately preceding the taking thereof: **Provided**, That the censuses of manufactures, of mineral industries, and of other businesses, including the distributive trades and service establishments, directed to be taken in the year 1954 relating to the year 1953, shall be taken instead in the year 1955 relating to the year 1954.

#### **Geographic scope of censuses (191a)**

Each of the censuses authorized by this chapter (other than censuses of population) shall include each State, the District of Columbia, Alaska, Hawaii, the Virgin Islands, Guam, and the Commonwealth of Puerto Rico, and as may be determined by the Secretary, such other possessions and areas over which the United States

exercises jurisdiction, control, or sovereignty. Censuses of population shall include all geographic areas referred to in the preceding sentence. Inclusion of other areas over which the United States exercises jurisdiction or control shall be subject to the concurrence of the Secretary of State.

#### **Failure to answer questions affecting companies, businesses, religious bodies, and other organizations: False answers (224)**

Whoever, being the owner, official, agent, person in charge, or assistant to the person in charge, of any company, business, institution, establishment, religious body, or organization of any nature whatsoever, neglects or refuses, when requested by the Secretary or other authorized officer or employee of the Department of Commerce or bureau or agency thereof, whether such request be made by registered mail, by certified mail, by telegraph, by visiting representative, or by one or more of these methods, to answer completely and correctly to the best of his knowledge all questions relating to his company, business, institution, establishment, religious body, or other organization, or to records or statistics in his official custody, contained on any census or other schedule prepared and submitted to him under the authority of this title, shall be fined not more than \$500 or imprisoned not more than sixty days, or both; and if he willfully gives a false answer to any such question, he shall be fined not more than \$10,000 or imprisoned not more than one year, or both.





## Appendix C

### **ALPHABETIC INDEX OF PRODUCTS AND SERVICES OF MINERAL ESTABLISHMENTS**

This index provides an alphabetic list of products and services, classified in the mineral industries, for which data are shown in table 6A of the industry chapters in volume I. The references in this index are to items for which statistics are either shown separately in that table or are included as part of a group of products or services. The index also includes products and services referred to in the industry descriptions in the text of the separate industry chapters. The page numbers indicate the text reference and the appropriate page of table 6A in the industry chapter.

References to products may be found in various tables in the industry chapters; however, more detailed product information is typically given in table 6A. Although no product codes are shown in table 6A, the industry code for the products or services may be found in the text of each chapter. The industry codes are based on the 1957 edition of the Standard Industrial Classification (SIC) Manual, as amended by the 1963 "Supplement to the 1957 Edition," published by the Bureau of the Budget.

It should also be noted that table 7 of chapter 1, General Summary, includes a comparison of quantity and value of selected mineral products as published in the 1963 Census of Mineral Industries and as published by the Bureau of Mines.

# ALPHABETIC INDEX OF PRODUCTS OF MINERAL ESTABLISHMENTS

Product	Page	Product	Page
<b>A</b>		<b>D</b>	
Abrasives, natural, except sand.....	14F-24	Diabase. See Traprock	
Acidizing and other chemical treatment of wells.....	13D-61, 62	Diamonds, industrial. See Abrasives, natural, except sand	
Agglomerates, iron.....	10B-11	Diaspore. See Fire clay	
Aluminum ores. See Bauxite		Diatomite.....	14F-25
Andalusite. See Clay and related minerals, n.e.c.		Diorite. See Granite	
Anthracite mining services.....	11B-11	Dolomite. See Limestone	
Antimony concentrates. See Metallic ores, n.e.c.		Drilling in, spudding in, tailing in, and reworking oil and gas wells.....	13D-59, 60
Apatite. See Phosphate rock		Drilling services:	
Aplite. See Clay and related minerals, n.e.c.		Oil and gas wells.....	13D-59, 60
Argillite. See Stone, miscellaneous dimension		Other than prospect or test drilling:	
Arsenic minerals. See Chemical and fertilizer mineral mining, n.e.c.		For bituminous coal and lignite mining establishments.....	12A-38
Asbestos, crude and prepared.....	14F-25	For metal mining establishments....	10E-14
Asphalt, native and bitumens.....	14F-24	Prospect and test drilling:	
<b>B</b>		For bituminous coal and lignite mining establishments.....	12A-38
Ball clay, crude and prepared.....	14D-20	For metal mining establishments....	10E-14
Barite, crude and prepared.....	14E-18	For nonmetallic minerals mining establishments.....	14F-23
Basalt. See Trap rock		Drips.....	13B-48-58 (ftn. 6)
Bastnaesite concentrates. See Metallic ores, n.e.c.		Dumortierite. See Clay and related minerals, n.e.c.	
Bauxite, crude and prepared.....	10D-10	<b>E</b>	
Bentonite, crude and prepared.....	14D-19	Emery. See Abrasives, natural, except sand	
Beryllium concentrates. See Metallic ores, n.e.c.		Erecting, cleaning, repairing, and dismantling lease tanks.....	13D-61, 62
Bituminous coal.....	12A-37	Excavating slush pits and cellars.....	13D-61, 62
Bituminous coal and lignite mining services.....	12A-38	Exploration work on contract:	
Borax. See Sodium borates		For bituminous coal and lignite mining establishments.....	12A-38
Boron compounds.....	14E-18	For metal mining establishments.....	10E-14
Boulders, mixed. See Stone, miscellaneous, crushed and broken		Oil and gas field.....	13D-60, 61
Brucite. See Clay and related minerals, n.e.c.		<b>F</b>	
Bluestone. See Stone, miscellaneous, dimension		Feldspar, crude and prepared.....	14D-21
Building, repairing, and dismantling rigs and derricks.....	13D-61, 62	Field condensate.....	13B-48-58 (ftn. 6)
<b>C</b>		Fire clay, crude and prepared.....	14D-19, 20
Calcareous tufa. See Limestone		Fluorspar, crude and prepared.....	14E-18
Cement rock. See Limestone, crushed and broken		Frasch process sulfur.....	14E-19 (ftn. 11)
Cementing wells.....	13D-61, 62	Fuller's earth.....	14D-20
Chemical and fertilizer mineral mining, n.e.c.....	14E-19	<b>G</b>	
China clay. See Kaolin or ball clay		Gabbro. See Granite	
Clay and related minerals, n.e.c.....	14D-21, 22	Ganister. See Sandstone	
Clay, fire.....	14D-19, 20	Garnet. See Abrasives, natural, except sand	
Cleaning out, bailing out, and swabbing wells.....	13D-61, 62	Gas, natural. See Natural gas	
Common clay and shale, crude and prepared.....	14D-21, 22	Gem stones.....	14F-25 and ftn. 7
Condensate, natural gas liquid plant...	13C-15-17 (ftn. 1)	Geophysical exploration services, oil and gas field.....	13D-60, 61
Construction sand.....	14C-21-24	Germanium concentrates. See Metallic ores, n.e.c.	
Copper concentrates.....	10C-25, 29 (ftn. 2, 3, 5)	Gilsonite. See Asphalt, native and bitumens	
Copper ores.....	10C-25, 29 (ftn. 2)	Glass sand.....	14C-21-24
Copper precipitates.....	10C-25, 29 (ftn. 2, 5)	Gneiss. See Granite	
Corundum. See Abrasives, natural, except sand		Gold, lode, concentrates.....	10C-27, 28, 29 (ftn. 2, 11)
Crude petroleum.....	13B-48-58 (ftn. 4, 5)		
Crushed and broken stone.....	14B-37-40		
Culm bank, recovering on contract for anthracite mining establishments.....	11B-11		

Product	Page	Product	Page
Gold, lode, mill bullion and precipitates.....	10C-27, 28, 29 (ftn. 2)	Mining minerals on contract:	
Gold, lode, ores.....	10C-27, 28, 29 (ftn. 2)	Auger mining for bituminous coal and lignite mining establishments.....	12A-38
Gold, placer.....	10C-28, 29 (ftn. 2, 12)	For metal mining establishments....	10E-14
Grahamite. See Asphalt, native and bitumens		For nonmetallic minerals mining establishments.....	14F-23
Granite, crushed and broken.....	14B-37-40	Molding sand.....	14C-21-24
Granite, dimension, rough and dressed..	14B-36, 37	Monazite concentrates. See Metallic ores, n.e.c.	
Graphite.....	14F-25 and ftn. 7		
Gravel.....	14C-21-24	N	
Greensand.....	14F-25 and ftn. 7	Natural gas.....	13B-48-58
Greenstone. See Stone, miscellaneous, dimension		Natural gas liquids.....	13C-15-17
Guano. See Chemical and fertilizer mineral mining, n.e.c.		Natural gasoline.....	13C-15-17 (ftn. 1)
Gypsum, crude and prepared.....	14F-23	Natural sodium carbonates and sodium sulfate.....	14E-18
I		Nonmetallic minerals, n.e.c.....	14F-25
Iceland spar. See Nonmetallic minerals, n.e.c.		Nonmetallic minerals services.....	14F-23
Ilmenite concentrates. See Titanium ores and concentrates		O	
Industrial sand, n.e.c.....	14C-21-24	Oil and gas field services. See also specific kind.....	13D-60-62
Installing production equipment, such as well head fittings, pumps, and engines.	13D-61, 62	Olivine. See Clay and related minerals, n.e.c.	
Iron agglomerates.....	10B-11	Ozokerite. See Asphalt, native and bitumens	
Iron concentrates (treated ores).....	10B-11	P	
Iron ores (including manganiferous)....	10B-11	Paper clay. See Kaolin or ball clay	
Iron oxide pigments, natural.....	14E-19 (ftn. 12)	Peat.....	14F-25
K		Perforating well casing.....	13D-61, 62
Kaolin, crude and prepared.....	14D-20	Perlite, crude and prepared.....	14F-25
Kernite. See Sodium borates		Petroleum, crude. See Crude petroleum	
Kerosene. (produced at natural gas liquids plants).....	13C-15-17 (ftn. 1)	Phosphate rock.....	14E-19
Kyanite. See Clay and related minerals, n.e.c.		Pinite. See Clay and related minerals, n.e.c.	
L		Placer gold. See Gold, placer	
Laterite. See Clay and related minerals, n.e.c.		Placer silver. See Silver, placer	
Lead concentrates.....	10C-26,27,29 (ftn. 2, 7-9)	Platinum group metals. See Metallic ores, n.e.c.	
Lead ores.....	10C-26,27, 29(ftn.2,9,10)	Potash, soda, and borate minerals....	14E-18
Lignite.....	12A-37	Potassium salts.....	14E-18
Limestone, crushed and broken.....	14B-37-40	Psilomelane. See Manganese ores	
Limestone, dimension, rough and dressed	14B-36, 37	Pumice and pumicite.....	14F-24
Liquefied petroleum gases.....	13C-15-17 (ftn. 1)	Pumping wells but not operating leases	13D-61, 62
Liquids, natural gas.....	13C-15-17	Pyrites.....	14E-19 (ftn. 12)
Lithium minerals. See Chemical and fertilizer mineral mining, n.e.c.		Pyrolusite. See Manganese ores	
Lode gold. See Gold,lode		Pyrophyllite, crude and prepared.....	14F-24
M		Q	
Magnesite. See Clay and related minerals, n.e.c.		Quartzite. See Sandstone	
Manganese ores.....	10D-10	R	
Manganese treated ores and agglomerates	10D-10	Residue gas.....	13C-15-17
Manganiferous iron ores.....	10B-11	Rhodochrosite. See Manganese ores	
Manganite. See Manganese ores		Rock salt.....	14E-19
Marble, crushed and broken. See Stone, miscellaneous, crushed and broken		Running, cutting, and pulling casing, tubes and rods.....	13D-61, 62
Marble, dimension. See Stone, miscellaneous, dimension		Rutile concentrates. See Titanium ores and concentrates	
Marl. See Limestone, crushed and broken		S	
Mercury ores and mercury metal.....	10E-14	Salts, potassium.....	14E-18
Metal mining services.....	10E-14	Sand.....	14C-21-24
Metallic ores, n.e.c.....	10E-15	Sandstone, crushed and broken. See Stone, miscellaneous, crushed and broken	
Mica.....	14F-23, 24	Sandstone,dimension. See Stone, miscellaneous, dimension	
Mica schist. See Stone, miscellaneous, dimension. See also Stone, miscellaneous, crushed and broken		Sillimanite. See Clay and related minerals, n.e.c.	
Mine exploration services. See Exploration work on contract			

Product	Page	Product	Page
Silver concentrates.....	10C-28, 29 (ftn. 2,6,9)	Sulfur.....	14E-19 (ftn. 11)
Silver mill bullion.....	10C-28, 29 (ftn. 2,6,9)	Syenite (except nepheline). See Granite	
Silver ores.....	10C-28, 29 (ftn. 2, 9)		
Silver, placer.....	10C-28, 29 (ftn. 2, 12)		
Sinking mine shafts and driving mine tunnels:		T	
For bituminous coal and lignite mining establishments.....	12A-38	Talc, crude and prepared.....	14F-24
For metal mining establishments.....	10E-14	Titanium ores and concentrates.....	10E-14
For nonmetallic minerals mining establishments.....	14F-23	Topaz (non-gem). See Clay and related minerals, n.e.c.	
Sinter, manganese.....	10D-10	Trap rock, crushed and broken. See Stone, miscellaneous, crushed and broken	
Slate, crushed and broken. See Stone, miscellaneous, crushed and broken		Trap rock, dimension. See Stone, miscellaneous, dimension	
Slate, dimension. See Stone, miscellaneous, dimension		Travertine. See Limestone	
Soapstone, crude and prepared.....	14F-24	Tripoli. See Abrasives, natural, except sand	
Sodium borates (borax, kernite, ulexite. See Potash, soda, and borate minerals		U	
Sodium carbonates, natural.....	14E-18	Ulexite. See Sodium borates	
Sodium sulfate, natural.....	14E-18	Uranium-radium-vanadium ores and concentrates.....	10E-15
Spodumene.....	14E-19 (ftn. 12)		
Staurolite.....	14F-25 (ftn. 7)	V	
Stone, dimension. See also specific kind.....	14B-36, 37	Vermiculite.....	14F-25 and ftn. 7
Stone, miscellaneous, crushed and broken.....	14B-37-40	Volcanic ash. See Pumice and pumicite	
Stone, miscellaneous, dimension.....	14B-36, 37	Volcanic rock. See Stone, miscellaneous, dimension. See also Stone, miscellaneous, crushed and broken	
Stoneware clay. See Fire clay		W	
Strip mining for others on contract:		Well surveying and well logging.....	13D-61, 62
For anthracite mining establishments.	11B-11	Wollastonite.....	14E-19 (ftn. 12)
For bituminous coal and lignite mining establishments.....	12A-38	Wurtzilite. See Asphalt, native and bitumens	
Stripping overburden on contract:		Z	
For anthracite mining establishments.	11B-11	Zinc concentrates.....	10C-26, 27, 29 (ftn. 2,7-9)
For bituminous coal and lignite mining establishments.....	12A-38	Zinc ores.....	10C-26, 27, 29 (ftn. 2,9,10)
For metal mining establishments.....	10E-14	Zirconium concentrates.....	10E-15
For nonmetallic minerals mining establishments.....	14F-23		
Strontium minerals. See Chemical and fertilizer mineral mining, n.e.c.			

## Appendix D

### INCIDENCE OF IMPUTATION FOR THE 1963 CENSUS OF MINERAL INDUSTRIES

At the end of the census collection and follow-up period, some small reports still have not been received. Even though the Census Bureau at this point initiates legal proceedings on a selected basis to enforce receipt of such reports, these proceedings are slow and publication of the census results cannot await their completion.

Estimates are included in the 1963 census tabulations for some small respondents on the basis of payroll information available for such establishments from the Social Security Administration records. The estimated figures are based, in general, on the relations between reported figures for other small establishments in the same industry.

In order to evaluate the significance of such estimates, the tables in this appendix have been developed. No comparable tables have been prepared on such estimates for earlier years. Although the number of establishments for which such estimates are made is significant, the data estimated usually represent a small proportion of the totals published. As indicated in the attached table A, the value of shipments and receipts for such largely estimated reports amounted to only 3.0 percent of the total value of shipments and receipts for all industries in 1963, to 4.6 percent for metal mining, to 2.1 percent for anthracite mining, to 2.3 percent for bituminous coal and lignite mining, to 2.5 percent for oil and gas extraction, and to 2.8 percent for nonmetallic minerals mining.

The major group for which these estimates are most significant both in number of establish-

ments and aggregate value of shipments and receipts is oil and gas extraction. In terms of value of shipments, the most significant estimates are for Industry 1311, Crude Petroleum and Natural Gas, for which the percent of value of shipments and receipts estimated is 3.7, with 3.1 percent estimated for the crude petroleum subindustry and 7.1 percent for the natural gas subindustry. Since this is the largest industry in the minerals census and quite significant in a number of areas, information on the extent of imputations of the above type was tabulated for it by geographic division and for selected States (table B). It will be noted that the percent of value of shipments and receipts estimated ranges from only 1.4 percent for the Pacific Division to 11.1 percent for the South Atlantic Division. It amounts to only 2 percent for Louisiana and to 4 percent for Texas, the two largest oil and gas producing States.

The effect of such estimates on the drilling statistics is of particular interest. Table C shows the relative magnitude of imputations in terms of number of wells, footage, and cost of drilling and equipping wells by divisions and selected States. These figures appear separately for oil wells, gas wells, dry holes, and service wells. The table shows that at the U.S. level, the percent of cost of drilling and equipping wells so estimated amounted to 4.0 percent for all wells, to 2.6 percent for oil wells, to 4.7 percent for gas wells, to 6.1 percent for dry holes, and to 1.1 percent for service wells. Such estimates, of course, appear more significant when data for the 200 largest companies are excluded. Hence, the estimates are shown also in this manner. In order to evaluate the nature of imputations included, these imputations are shown separately in terms of average footage drilled per well and cost of drilling and equipping wells per foot in the last two columns of table C. The estimates were made on the basis of detailed information reported by the smaller companies. It will be noted that the average depths and average costs per foot estimated are fairly close to the final averages for wells reported by all companies excluding the 200 largest.

(All figures represent percents of industry or subindustry totals for the United States)

Ind. code	Industry	Number of establishments	Value of shipments and receipts	Ind. code	Industry	Number of establishments	Value of shipments and receipts
	All mineral industries....	10.0	3.0		Oil and gas field services--Con.		
10	Metal mining.....	7.4	4.6	1389	Oil and gas field services, n.e.c.:		
1011	Iron ores.....	3.8	0.1		Survey, log, cement services subindustry.....	2.2	0.2
1021	Copper ores.....	2.5	0.0		Miscellaneous oil and gas field services subindustry.	3.1	1.6
1031	Lead and zinc ores:			14	Nonmetallic minerals mining.	4.5	2.8
	Lead ores subindustry.....	-	-				
	Zinc ores subindustry.....	7.2	1.2	1411	Dimension stone.....	6.6	5.1
1042	Gold and silver ores:				Dimension limestone.....	21.3	17.6
	Lode gold.....	8.5	2.7		Dimension granite.....	3.0	1.0
1043	Placer gold.....	3.2	6.1		Dimension stone, n.e.c.....	3.1	4.3
1044	Silver ores.....	0.9	0.0	1421	Crushed and broken stone.....	3.6	2.2
1051	Bauxite.....	-	-		Crushed and broken limestone..	4.4	2.6
	Ferroalloy ores:				Crushed and broken granite....	3.2	1.7
1062	Manganese ores.....	23.5	5.5		Crushed and broken stone, n.e.c.....	1.3	1.1
1064	Tungsten ores and ferroalloy			1441	Sand and gravel.....	4.1	5.7
1069	ores, n.e.c.....	14.6	0.8		Clay and related minerals:		
1081	Metal mining services.....	18.1	8.0	1452	Bentonite.....	2.3	0.3
	Miscellaneous metal ores:			1453	Fire clay.....	3.9	3.8
1092	Mercury ores.....	6.1	4.2	1454	Fuller's earth.....	6.7	0.0
1093	Titanium ores.....	-	-	1455	Kaolin and ball clay.....	2.1	0.3
1094	Uranium-radium-vanadium ores..	8.7	1.0	1456	Feldspar.....	9.7	1.0
1099	Metallic ores, n.e.c.....	28.0	6.7	1459	Clay and related minerals, n.e.c.....	6.2	1.8
11	Anthracite mining.....	3.1	2.1	147	Chemical and fertilizer minerals	6.0	0.1
1111	Anthracite.....	2.8	1.8	1472	Barite.....	5.6	0.3
1112	Anthracite mining services.....	9.3	0.7	1473	Fluorspar.....	6.7	0.2
12	Bituminous coal and lignite mining.....	13.6	2.3	1474	Potash, soda, borate minerals	-	-
				1475	Phosphate rock.....	7.6	0.2
1211	Bituminous coal.....	12.6	2.3	1476	Rock salt.....	4.0	0.0
1212	Lignite.....	6.8	1.2	1477	Sulfur.....	11.8	0.1
1213	Bituminous coal and lignite mining services.....	9.9	4.5	1479	Chemical-fertilizer mining, n.e.c.....	5.0	0.0
13	Oil and gas extraction.....	11.7	3.5	1481	Nonmetallic minerals services...	5.0	1.2
1311	Crude petroleum and natural gas.	12.2	3.7	149	Miscellaneous minerals, n.e.c...	6.2	2.6
	Crude petroleum subindustry...	12.5	3.1	1492	Gypsum.....	2.7	0.1
	Natural gas subindustry.....	10.5	7.1	1493	Mica.....	17.6	4.4
1321	Natural gas liquids.....	-	-	1494	Native asphalt and bitumens...	7.5	2.0
	Oil and gas field services:			1495	Pumice and pumicite.....	-	-
1381	Drilling oil and gas wells....	13.4	2.5	1496	Talc, soapstone, pyrophyllite.	1.5	1.2
1382	Oil and gas exploration services.....	13.4	2.5	1497	Natural abrasives, except sand	-	-
				1498	Peat.....	5.5	6.8
				1499	Nonmetallic minerals, n.e.c...	14.9	3.4

Standard Notes: - Represents zero.

n.e.c. Not elsewhere classified.

(All figures represent percents of industry or subindustry totals for the specified area)

Division or State	Crude petroleum and natural gas industry		Crude petroleum subindustry		Natural gas subindustry	
	Number of establishments	Value of shipments and receipts	Number of establishments	Value of shipments and receipts	Number of establishments	Value of shipments and receipts
United States.....	<sup>1</sup> 12.2	<sup>1</sup> 3.7	12.5	3.1	10.5	7.1
Middle Atlantic.....	13.0	9.9	16.0	17.6	2.3	1.1
East North Central.....	14.6	8.8	13.8	8.7	24.4	9.9
Illinois.....	17.7	7.0	17.7	7.0	-	-
West North Central.....	12.5	4.0	13.2	4.7	-	-
Kansas.....	14.6	5.2	15.5	6.6	-	-
South Atlantic.....	9.3	11.1	12.6	8.0	6.1	12.2
East South Central.....	14.9	4.3	16.5	4.6	-	-
West South Central.....	12.6	3.7	12.3	3.0	15.0	7.7
Louisiana.....	14.2	2.0	16.9	2.4	1.5	0.1
Oklahoma.....	11.7	7.5	9.5	5.3	35.0	26.9
Texas.....	13.1	4.0	13.0	2.8	13.7	11.5
Mountain.....	9.1	3.0	10.1	2.3	3.7	11.0
Wyoming.....	8.8	0.7	9.2	0.8	-	-
Colorado.....	17.8	8.9	21.1	9.4	-	-
New Mexico.....	4.5	3.6	4.5	2.1	4.7	11.9
Pacific.....	5.7	1.4	6.0	1.5	2.3	0.0

Standard Notes: - Represents zero.

<sup>1</sup>Excluding the 200 largest companies the percentages are, for number of establishments, 14.1 percent; for value of shipments and receipts, 22.4 percent.



TABLE C. INCIDENCE OF DRILLING STATISTICS IMPUTATIONS FOR INCOMPLETE REPORTS IN THE CRUDE PETROLEUM AND NATURAL GAS STATISTICS

Division or State	Percent of total for the specified area						Average footage and costs of drilling and completing wells					
	All companies			Companies excluding 200 largest companies			All companies		Companies excluding 200 largest companies		Imputations	
	Wells drilled	Footage drilled	Cost of drilling and equipping wells (dollars)	Wells drilled	Footage drilled	Cost of drilling and equipping wells (dollars)	Average footage drilled per well	Cost of drilling and equipping wells per foot (dollars)	Average footage drilled per well	Cost of drilling and equipping wells per foot (dollars)	Average footage drilled per well	Cost of drilling and equipping wells per foot (dollars)
ALL WELLS												
United States....	8.6	7.1	4.0	14.3	15.1	15.1	4,288	11.70	3,370	6.55	3,558	6.55
Middle Atlantic....	7.7	3.6	3.0	11.6	5.0	6.7	2,287	7.10	2,476	4.37	1,079	5.79
East North Central.	7.2	5.6	3.9	8.5	6.9	5.2	2,301	6.43	2,222	6.01	1,785	4.54
Illinois.....	4.5	4.4	2.5	6.0	5.5	3.6	2,064	6.41	2,173	5.61	2,000	3.63
West North Central.	4.8	4.8	4.3	6.4	6.8	7.5	3,187	6.68	2,984	5.43	3,154	6.02
Kansas.....	3.8	4.0	4.4	5.0	5.4	7.1	2,877	6.60	2,764	5.61	3,000	7.31
South Atlantic....	32.6	33.7	33.8	40.5	43.3	46.9	2,682	10.12	2,591	9.37	2,773	10.14
East South Central.	11.4	6.9	5.5	4.4	10.4	9.7	3,902	8.22	3,520	6.99	2,358	6.52
West South Central.	9.4	7.6	3.7	16.4	18.0	17.0	5,028	12.52	3,703	6.46	4,063	6.13
Louisiana.....	13.8	9.3	2.6	30.1	30.6	27.2	6,773	17.92	4,485	5.68	4,565	5.05
Oklahoma.....	4.4	3.7	2.8	6.9	7.6	8.5	3,984	10.17	3,031	6.78	3,368	7.59
Texas.....	8.8	7.2	4.6	15.2	15.8	15.6	4,736	10.34	3,725	6.66	3,875	6.59
Mountain.....	7.7	9.0	4.3	17.3	23.2	17.2	5,226	12.52	4,563	8.17	6,120	6.07
Wyoming.....	-	-	-	-	-	-	4,950	12.24	4,942	7.99	-	-
New Mexico.....	8.9	12.3	4.6	23.0	38.5	20.4	5,341	14.14	4,397	9.91	7,364	5.26
Pacific.....	-	-	-	-	-	-	3,375	18.25	3,850	10.69	-	-
OIL WELLS												
United States....	5.7	4.9	2.6	10.7	12.0	10.5	4,054	13.05	3,095	7.93	3,475	6.97
Middle Atlantic....	9.9	6.6	5.9	12.5	8.7	7.4	1,499	3.32	1,441	3.54	1,000	3.00
East North Central.	0.9	0.8	0.9	1.1	1.0	1.2	2,251	8.27	2,340	7.56	2,067	8.77
Illinois.....	-	-	-	-	-	-	2,140	8.79	2,270	7.70	-	-
West North Central.	7.6	7.9	6.3	10.2	11.1	11.3	3,020	9.20	2,865	7.26	3,119	7.33
Kansas.....	8.0	8.8	7.3	10.4	11.6	11.5	2,715	8.73	2,694	7.30	3,000	7.24
South Atlantic....	30.0	28.2	29.7	32.4	30.6	30.6	2,133	8.12	2,116	8.58	2,000	8.57
East South Central.	4.2	4.1	2.7	5.6	5.9	4.7	4,091	10.84	3,789	9.16	4,000	7.25
West South Central.	7.2	5.7	2.9	13.6	15.6	13.5	4,725	13.24	3,274	7.81	3,734	6.77
Louisiana.....	12.4	3.5	2.2	30.2	33.5	27.5	6,117	18.67	3,608	6.10	4,000	5.00
Oklahoma.....	3.4	3.4	3.3	5.4	7.3	9.1	3,958	10.89	2,950	8.41	4,000	10.50
Texas.....	6.0	4.6	3.1	11.7	12.0	11.2	4,480	11.27	3,372	8.14	3,458	7.60
Mountain.....	0.8	1.2	0.8	2.4	4.3	4.7	5,363	15.22	4,454	9.28	8,000	10.00
Wyoming.....	-	-	-	-	-	-	4,549	15.46	4,138	10.84	-	-
New Mexico.....	-	-	-	-	-	-	5,382	15.8	4,362	9.29	-	-
Pacific.....	-	-	-	-	-	-	2,769	19.03	2,876	11.09	-	-
GAS WELLS												
United States....	10.0	7.2	4.7	20.0	19.6	22.1	5,514	16.48	4,081	9.43	4,007	10.64
Middle Atlantic....	1.3	2.7	3.0	4.8	5.2	6.9	3,935	10.33	3,686	8.49	4,000	11.25
East North Central.	0.6	0.2	0.2	0.8	0.3	0.3	2,889	7.46	2,745	7.04	1,000	7.00
Illinois.....	-	-	-	-	-	-	1,808	4.64	1,846	4.64	-	-
West North Central.	2.3	2.1	2.2	3.8	3.9	5.1	3,297	8.99	2,947	7.17	3,000	9.33
Kansas.....	2.3	2.1	2.2	3.9	4.0	5.1	3,282	9.04	2,930	7.20	3,000	9.33
South Atlantic....	34.0	36.6	36.9	43.9	47.4	50.2	2,784	10.20	2,781	9.69	3,000	10.27
East South Central.	11.0	8.9	6.1	27.8	26.4	30.4	3,735	10.65	3,153	6.37	3,000	7.33
West South Central.	5.6	4.3	2.5	13.5	14.2	16.6	6,973	18.53	5,036	9.36	5,299	10.99
Louisiana.....	12.0	7.2	2.6	33.8	36.2	33.0	8,328	27.95	4,676	10.94	5,000	10.00
Oklahoma.....	-	-	-	-	-	-	6,062	13.27	4,230	8.65	-	-
Texas.....	4.5	3.7	2.8	10.5	11.0	13.8	6,717	15.27	5,348	9.02	5,593	11.35
Mountain.....	13.3	12.1	8.9	34.3	36.0	32.2	6,060	15.27	5,240	12.60	5,500	11.29
Wyoming.....	-	-	-	-	-	-	6,048	21.62	5,500	20.82	-	-
New Mexico.....	15.5	14.0	11.9	43.5	44.7	44.9	6,636	14.77	5,837	12.45	6,000	12.50
Pacific.....	-	-	-	-	-	-	6,104	20.82	6,324	12.44	-	-

TABLE C. INCIDENCE OF DRILLING STATISTICS IMPUTATIONS FOR INCOMPLETE REPORTS IN THE CRUDE PETROLEUM AND NATURAL GAS STATISTICS--Continued

Division or State	Percent of total for the specified area						Average footage and costs of drilling and completing wells					
	All companies			Companies excluding 200 largest companies			All companies		Companies excluding 200 largest companies		Imputations	
	Wells drilled	Footage drilled	Cost of drilling and equipping wells (dollars)	Wells drilled	Footage drilled	Cost of drilling and equipping wells (dollars)	Average footage drilled per well	Cost of drilling and equipping wells per foot (dollars)	Average footage drilled per well	Cost of drilling and equipping wells per foot (dollars)	Average footage drilled per well	Cost of drilling and equipping wells per foot (dollars)
DRY HOLES												
United States....	13.2	10.1	6.1	18.4	17.4	18.6	4,664	8.68	3,766	4.87	3,560	
Middle Atlantic....	9.7	1.6	1.1	17.5	4.6	4.8	3,029	9.99	1,895	6.81	500	
East North Central.	14.5	11.1	10.1	15.5	12.5	11.3	2,391	4.48	2,281	4.54	1,831	
Illinois.....	10.0	9.1	7.6	10.6	9.7	8.0	2,192	3.74	2,183	3.82	2,000	
West North Central.	3.1	2.7	1.6	4.0	3.8	2.5	3,723	4.36	3,452	3.81	3,258	
Kansas.....	-	-	-	-	-	-	3,411	4.32	3,212	3.88	-	
South Atlantic....	28.5	27.2	26.0	37.1	41.5	52.2	3,139	12.27	2,681	9.32	3,000	
East South Central.	20.3	9.4	10.3	23.8	13.4	16.6	4,261	5.64	3,511	5.20	1,986	
West South Central.	15.2	11.8	6.2	22.0	21.7	22.8	5,346	9.58	4,204	4.80	4,146	
Louisiana.....	16.3	11.3	3.3	29.4	27.9	24.6	7,188	13.67	5,267	4.54	5,000	
Oklahoma.....	10.3	7.0	4.5	14.2	11.8	13.2	4,408	8.27	3,614	4.78	3,000	
Texas.....	15.3	12.5	9.3	20.7	20.6	23.0	4,844	7.39	3,978	4.95	3,966	
Mountain.....	12.8	10.2	7.0	22.2	20.3	19.3	5,309	9.09	4,610	6.60	4,222	
Wyoming.....	-	-	-	-	-	-	5,839	8.75	5,254	6.69	-	
New Mexico.....	22.2	13.6	7.3	39.8	30.7	21.0	4,870	11.29	3,886	8.77	3,000	
Pacific.....	-	-	-	-	-	-	5,022	15.89	4,717	9.88	-	
SERVICE WELLS												
United States....	1.9	1.4	1.1	3.6	3.2	4.5	1,813	7.23	1,459	4.27	1,300	
Middle Atlantic....	7.0	2.0	2.9	12.8	4.4	6.3	1,739	2.77	1,462	2.76	500	
East North Central.	8.1	6.8	6.3	18.3	19.1	25.0	1,585	6.47	1,274	4.60	1,333	
Illinois.....	3.9	5.1	5.1	13.3	18.2	25.1	1,512	7.05	1,467	5.06	2,000	
West North Central.	-	-	-	-	-	-	1,392	5.74	1,152	4.93	-	
Kansas.....	-	-	-	-	-	-	1,326	5.51	1,078	4.82	-	
South Atlantic....	43.5	39.2	38.1	62.5	29.4	58.8	2,217	6.69	2,125	6.50	2,000	
East South Central.	-	-	-	-	-	-	1,224	6.21	1,342	5.42	-	
West South Central.	-	-	-	-	-	-	2,123	7.41	1,554	4.00	-	
Louisiana.....	-	-	-	-	-	-	2,941	9.78	2,444	5.05	-	
Oklahoma.....	-	-	-	-	-	-	1,707	5.35	1,507	3.83	-	
Texas.....	-	-	-	-	-	-	2,506	8.67	1,567	4.20	-	
Mountain.....	-	-	-	-	-	-	1,604	13.84	2,089	5.68	-	
Wyoming.....	-	-	-	-	-	-	1,195	13.66	1,381	5.00	-	
New Mexico.....	-	-	-	-	-	-	1,667	13.27	2,000	7.77	-	
Pacific.....	-	-	-	-	-	-	2,417	15.52	-	-	-	

Standard Notes: - Represents zero.